

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1659:

TTAATCCCAC AAACAAATGT ATGAAATTGA GTCAGTGATA TTAAATATGG GCTTGAAAGT 60  
 5 GTCTA 65

(2) INFORMATION FOR SEQ ID NO: 1660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1660:

TGCATTTTTG TAAGAACGCA AAGCATTGTA AATTAGTTTT TATAAATTAG GATATTATCA 60  
 20 TGTGTATTGA AAACAATGAA GTGTGCTATG A 91

(2) INFORMATION FOR SEQ ID NO: 1661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1661:

ACATATCTGT CCACACAACA AGGACCATTT GTCTGAAGGG ACAGTGAGTG GGGAAATATGT 60

(2) INFORMATION FOR SEQ ID NO: 1662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1662:

TGGGGTTTTA ACCAGGGGAC CTAAAACCAG CCCCCATTTT CCAAGTTTGG ACCCCAAATT 60  
 CCCCnAAATTT AAAAAAAATT TGTTTGGGGT CTAAGTTGGG CCGGTGCCTT CCTGCCTAAA 120  
 TTTAGCCCAT GTCTAACATA GTACTTTGGG AACGTAAAAG TTTAATTTA 169

(2) INFORMATION FOR SEQ ID NO: 1663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1663:

	TGGCACAATT GCACCAATTA AATGAATAAC TTTATCATTT TTATATACAG GTACAACAAT	60
10	CGCTTCTTTT ACGAACTCAG ACTGGCGTAA TTGTGTTTCA ATTTCTTCTA ATTCCATTCT	120
	GTAGCCATTTC AATTTGATTT GGAAATCAAT ACGACCTTGA ATGAACCATT GACCATTTTC	180
	AAACTTCGCT TTATCACCAG TGTGATATGT ACGAATACCG TCATCGAAAT TAAATACTTC	240
15	AGCTGTTTTT TGGTCATTTT TTAAGTATCC TAAACTTACA CTTTGACCTT CGATAACAAG	300
	TTCACCTTCA TCTGTAGTAG ATAATCTTGC GCCTGGTCTT TCAACGCCAA CAGGTAATGT	360
	CGGATATTGA TCTAAGATTT CTTGTGTAAT TTGAATACTT GTAAGTCTA CCGTAGCTTC	420
20	AGTTGGACCA TATGTGTTGT AAATCGTCGC ACTTGGGAAA CGGTTTACTA ACGCTTTTGC	480
	TGCTCTGTGA GGTAGAATTT CACCACAGAA GAAGAATTCG TTAAGACTAC CATATTGTTC	540
25	TTCAATTAAGC GTTGGAATA ATAAACACAT TTCCATAAAT GATGGTGTTG ATACCCAAAT	600
	GTTAATCGGT GTTGCTGTTA GCATTTTATT TAATAATTTA GGTATTATTAA TCATGTTTTT	660
	ATCTACAAGA nTnAAnG	677

30 (2) INFORMATION FOR SEQ ID NO: 1664:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1664:

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GTTACAACAA TAGTGGTATA AAACGGGAGC AATTAGAGAT CAATATATGA TTATTAAGAG	60
CA	62

45 (2) INFORMATION FOR SEQ ID NO: 1665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1665:

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GTTTACGCAA ATGATAGCTC GGTAACAT GAGCAACATG TTGAAGCCAA TTTGGAAATG 120  
 TGTATTATCGG AAACCACAAT CCACCTAATA CTGCTAAACC AATTGTTACG ATATTAGCTA 180  
 5 AAGCACTTGT TTTTGAATA TCATTTAACA AAGAACCATA ATATGCCAAA AGTTATTAAT 240  
 AGAGACGCAC CTAACCATAA AAATATTCCT GACTCTAACC ATTGAACTGC ACTCATTGCA 300  
 ACACCTTTAT AAAAATGTCC AACCATAAAA ATAATAATA TC 342

10 (2) INFORMATION FOR SEQ ID NO: 1666:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 102 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1666:

GTCCAAGAAT TCAAAAACGT TTTCAACTTC GGCCAAAGCC CAATTTnTCT TTGTGGTTTA 60  
 ACTTTTTTAAT TTTGAACGTT TTAGGGCATA AAAAAAAAAA GG 102

25 (2) INFORMATION FOR SEQ ID NO: 1667:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 122 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1667:

TTGATAGTAG CCATAATCAT ACCACTTAAA TAATATGTTT GATCATCGGC ATAATTTTTTA 60  
 TTTATTGTCT GTTCGCAATA TTTGAGCAT TATCATAATT ACCACTAGTC ATATCATCTT 120  
 TG 122

40 (2) INFORMATION FOR SEQ ID NO: 1668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1668:

AGAGATGAAA TTAAAATCGC AATTGAAAAT TTCAAATCAC GATGAGAGTG GGACAGA 57

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1669:

AACTACTGCC AATATTAATA GCATTGGTAC ATCTTAGAGG CATTGAATTC CTTACTCAGA 60  
 CTCATAATGC 70

(2) INFORMATION FOR SEQ ID NO: 1670:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1670:

TTGTCTGATA TAATCCATTT CGATTGGACT CCACACGTTA CACCGATACC TTCTTTACCA 60  
 GCCCGACCCG TAC 73

(2) INFORMATION FOR SEQ ID NO: 1671:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1671:

GAAGAATTGT ACTGTTAAAG TGA CTCTAAA CTATCGCGGA AATAACAGTG AAATCACCAA 60  
 TTAGACTAGC GACACTGAAG TCATTAAAAA CAGACATTTG TAGTGGTG Cn CTTATCACCG 120  
 CAAATACAAG AGAGTTTCTC 140

(2) INFORMATION FOR SEQ ID NO: 1672:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AACAACGTTT ACTATTGGCA CAGAACGGTT GGTACTTAGT CTAATACCAT TGTCATCAA

59

(2) INFORMATION FOR SEQ ID NO: 1673:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1673:

ATCTCTTGA CTTGAAGGAT TGGATTAAA TCTGGTGAT TTGGGCCGTG AAATATTTCC 60  
 AGAAAATTCC TCAGACGTAT TAGTATAATT GTAACGnTAC ATTCTAATAT ACCTTTCTTC 120  
 GATG 124

(2) INFORMATION FOR SEQ ID NO: 1674:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1674:

CACCACCACC ACACACACAC ACACAAACAC ACAACCCCC CACACACAAA CCACACCACC 60  
 AACACACCAA CACAnCACAA AAACCCACCA CACACACCAC ACACCAACC 109

(2) INFORMATION FOR SEQ ID NO: 1675:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1675:

TnGTCAACTG ATTTATGAAA TGGCAGAGCA TATGGCGTCA AAGGTTCTTA ATCGTTAAGC 60  
 CAGACCACTG GAGGACCATT AGATGCAGCG TTGCTTTCAG G 101

(2) INFORMATION FOR SEQ ID NO: 1676:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1676:

TTTTTAAAT TTGnAAATTT TAGACCTTAT TTCACGTGCG ATTTAATCGA TGTGTTAATA 60  
 5 AAACAATACT GGCATTCAAC ATGTAATCCG ATAATAAAAT AAGGTTGCAA TTATGTTATT 120  
 GCATATTTTG TTTATTACTT AGAATAATAC GATGGTTAAG ATGAAATATA TGACAAAGAT 180  
 AAATAATGAC ATTAAATTCA AGATGTTTAC GCCTTTTAGA TCTTTTTTAA GCATTTTAAA 240  
 10 TCCTGTCACT TCKACATTAC CGACTAAGAG TAATAAGACG ATAAATACCC ACCAATTsTC 300  
 TTTTGGAAAA CTCATCGTGC TTAATGCTAA GACGAATAAT AACAACACAC CCATAATAAT 360  
 15 TCTCAAAATG CGAGTAAATA CAACTTCCAT TTTAAAAATA 400

(2) INFORMATION FOR SEQ ID NO: 1677:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1677:

TCTTACTCAT GCATATGAGT GCAAGGGCCT GAGCATTCAT CAGCAAGATT AGAGCGATTT 60  
 TTAC 64

30 (2) INFORMATION FOR SEQ ID NO: 1678:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1678:

ACAGCTGATT TATTAAATGA TACTAAGTCC AAAGGCATGC GCATTATATC AGTTGGTACA 60  
 TTTCA 65

45 (2) INFORMATION FOR SEQ ID NO: 1679:

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1679:

5 AGCGCCACCA ACTGACGAAT TAGGTGGTAG TTGGACACTA TGGAAAAATT TAGCGCGACA 60  
 AAGTCCTGAA TTTGGTAATC CTGATAAGTT TTGCCAAAAT ATTCTTA<sub>n</sub>AA AAAGTTGGTT 120  
 TGT<sub>TTT</sub>CAGCA ACTTCTACAA CAAACAATAA AGAGATTATC GATACAATAG AAAGTATTTG 180  
 10 TAAACGTGAC CCACTTGGCA GGCAAAACAG TTACAGGCGG TATTATTACA ATCAATGATT 240  
 CTGcATGGCA AATGAGTTTT ACAATCAATC GTGCAGCAAC AGTTTGAAAG ACCAACCTGG 300  
 AAAATGGAAA TATCTACATG GGGTTTGATG CCTTATGATT CnGGnGTAAA CGGCGGTTGA 360  
 15 TG 362

(2) INFORMATION FOR SEQ ID NO: 1680:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1680:  
 AGATACTTCA GATTTAGCAT CATGAAGCAA CTTTAAAAGC AATCGCTGAC GCTGGTATTC 60  
 30 AGCCCGAGG 69

(2) INFORMATION FOR SEQ ID NO: 1681:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1681:  
 TAACCAT<sub>TTT</sub>C TTTTGACGTT TTATGTTGTT TTAAGAAATA AATACCAGTT AATGTA 56

45 (2) INFORMATION FOR SEQ ID NO: 1682:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1682:

## (2) INFORMATION FOR SEQ ID NO: 1683:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1683:

CCCCAACACA ACAACAACA CACCCACCAC CCAACCCAC CACACCCACC CACCACCCCA 60  
ACCCACCACA ACACCACnCA CCAACACACA CCACACAACA ACCCCACAC 109

## (2) INFORMATION FOR SEQ ID NO: 1684:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1684:

ATTATGTTTCG CGATAATTTA AGTAAAAGAA GCACAGATAT TGAATTTGAT AGGAGTAATT 60  
GT 62

## (2) INFORMATION FOR SEQ ID NO: 1685:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1685:

CATAAGGTAC TTAAATTAAG GCATATCTGC TGTCTAGCAG TCGCATAAAT CATTAGA 57

## (2) INFORMATION FOR SEQ ID NO: 1686:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1686:

## (2) INFORMATION FOR SEQ ID NO: 1687:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1687:

CTTTATAGTA TATTGCTTTT TGTITTTTCTT TTTCGTCATA TTTCACITTTT AAATAGATAC 60  
 CTGCAACACT AATTAATATG ATTAACATAA TACTAGTTAA TATTAAnATT 110

## (2) INFORMATION FOR SEQ ID NO: 1688:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1688:

AATTACTAGT CTGCTTGTCC AAAGATTATT TATATTCTAG CTCAACATTA ATTTCTTTGA 60  
 TTTTGGTACC ATCTATCGTG TCACCCATGC GATGCGGTTG TAGTTTTTTTT GTAAGTTCTGA 120  
 AAGTATAAAA CTTATCATCT TCCATTTTAA CTACAATTTT ACCTTTTCTA TTATTAACAG 180  
 CACCATATAA TTTTCTTCT TCCATCAATT TTTT 214

## (2) INFORMATION FOR SEQ ID NO: 1689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1689:

GCTAGTTGTA ACGTGCTTTT TCACCACCAG ATAAATCATA ATATCTTTTA ACATCTCTG 59

## (2) INFORMATION FOR SEQ ID NO: 1690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1690:

CCAAACTTTA TAATATGAAA TGCTTGGTAA TTACAAAGAT AAAATCATAC TCACG

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(2) INFORMATION FOR SEQ ID NO: 1691:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 64 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1691:

TAGACAGCAA TCCATTGCTA TAGGGGTGGA TATCTCATTT GCGTTTGGAG CTGTGCTTGT

60

TATG

64

(2) INFORMATION FOR SEQ ID NO: 1692:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1692:

TGCATGGGAT TGCAGCTAAG AGAATCATAA AAATATATTA CTTTAATAAG TG TAGTA

57

(2) INFORMATION FOR SEQ ID NO: 1693:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 74 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1693:

CGATGTGTAC GTCTCACCTG ATTTGCGACG GTAAGCTAGT GCATATTCAG CACCGCTACT

60

CGCCCAGCCT AGAC

74

(2) INFORMATION FOR SEQ ID NO: 1694:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 162 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1694:

AACTTTTCAG ATGTTGATAG CTATAGATTT AGGCGCTATT CACCA<sub>n</sub>GTCT ACATGCAATA 60  
5 CGTACGTTAT AATGCACTGC AACGAATCGC GCGTTATGAG TTGGTAATTG TTGTTCAATA 120  
TTGGGTGTAT AGTTTTCAAC GTGGTTACAA GCAACTACCT AA 162

(2) INFORMATION FOR SEQ ID NO: 1695:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1695:

20 AATTATCTCT ACACCTTTTC TTTCACATAA TTGACGCAAT ATAATCCCTA TATCT 55

(2) INFORMATION FOR SEQ ID NO: 1696:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1696:

30 ATGCAACGTT GGCATTGGGA AATGGTCCTG CCTAAATTAA CACGCAATAA AATGTG 56

(2) INFORMATION FOR SEQ ID NO: 1697:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1697:

45 ACTGTGTAGA AGATGCTATT ATTGTAAAAC ATAGTTTTAA TTTTATTTTC TGATATA 57

(2) INFORMATION FOR SEQ ID NO: 1698:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 109 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
50 (D) TOPOLOGY: linear  
55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1698:

AAAATTTTCC CCCGGGAACC CGGTTTTTTTA AACCCCCCGT TTTAAAAAAA TTTTGGGGGG 60  
 5 CCCAAAATTT CCCAAAAAAA nAAAAAATTT TTTTTTTCCC GGGGAAAAA 109

(2) INFORMATION FOR SEQ ID NO: 1699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1699:

GTGTTAACGT GGATTATATC AAnGAGGCGG TCAGGTACAG TCCACACGCA CAGCGCACAG 60  
 20 AAGTATCACA TCCAGTAAAC AAGGCTAGTA CAGCATTGCA 100

(2) INFORMATION FOR SEQ ID NO: 1700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1700:

AAGGTAAAT GAATTAGGTT GATCAATGCT CTATACTCAT TGCTAAGTCA ACGCACCTTT 60  
 35 ACCACCTTTT CCCAACTCAG TAAGGCATTC GACGTATTTT TTAGCCAAGn TTACATATCT 120  
 ACTCTGCAC 129

(2) INFORMATION FOR SEQ ID NO: 1701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1701:

CAAGAGGAAC AACTCGGTAC TGCGCATCAG CAGAGATGGC GAAATCACAC TTAGAAGACA 60  
 AGG 63

(2) INFORMATION FOR SEQ ID NO: 1702:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1702:

10 TATTTAATAA ATCTTCAATA CCTTGTTTCAT CAGTTTGTG ATAAATAAGA CCTCTCCATT 60  
 TTAAATCTTC AATTAATACA TTCGTCATTA TTATTTCTCTC CTATTTATAA TTATTTATTG 120  
 AATACTTGTT AAAATACTTT AAAGKTTTTT GAACGTAAAA AAAACCCTTA CAACAAATAT 180  
 15 GTAAGGGCGC GATTGCACGT TACCACCAAA CTAAACATA ATCATAAGAT AATGTTCACT 240  
 CTATTAATGA TACGTTTCATT AATAAACGTA GGACATGTTA GTTATAAAGG TGTATTCTATA 300  
 TTATTAAAAA CACTAGTTCA CAGCGACCAC TAGCTCTCTG ATGATTTCAT ATAATATTAC 360  
 20 TTGTCCTTTT ATCCTATTCT GTATGCATTT TCCCTAATTA 400

(2) INFORMATION FOR SEQ ID NO: 1703:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1703:

TCAATATTGA TATCGAAACG CTTTGCAGAT TGATATAAAT TATCAGAATC AAGTAATTCA 60  
 35 TTTATTTTCT TTGGTGAAAG TACTTGGAAT ATACTATACT GATGAAAAT TAAAAATGAA 120  
 ATGAAGTATG GAAGTTGTTG CTTTGGGTAA GCnAAATTTT TAATACATAC TGATTAAACT 180  
 40 GTTTGTTTAT TGnGAATTGC AACGCATC 208

(2) INFORMATION FOR SEQ ID NO: 1704:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1704:

AAGCCGATGT AATTATTTAT GCAACACCTG TTCTAATGCA CAAAGAAATA TCTTAGCGAG 60  
 CTTATAG 67  
 55

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1705:

CCAAGTTGCA TGTTATTTTA AGCTGACTTT CCACCAACTT CTGAGTTTGT GGCC

54

(2) INFORMATION FOR SEQ ID NO: 1706:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 61 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1706:

CAACTACACG AAAGGGTAGT GCTTCAAGAT AATAACGTCC AATTATTAGG AACTGTGGCG

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1707:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1707:

ACCATTCCAA ATGAACCTAA ACCACTTGAT ACGTTGACGA CAACAGGTTG TTCA

54

(2) INFORMATION FOR SEQ ID NO: 1708:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 59 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1708:

AAATTGAAT AACTGTACAC ATTTTTTTGA TCATAGTCTA TATACTTTGT GAATTAATT

59

(2) INFORMATION FOR SEQ ID NO: 1709:

- (A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1709:

10 GCACAATAGC CAATTAGATG GGGCCGGTGC GGTAACATTT TGCTTCATTC CTGCATTAT 59

(2) INFORMATION FOR SEQ ID NO: 1710:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1710:

TTACAATTCA ATCAAGTTCT TCATTATCAG ACGAAGAAAT CCACCGTATG GTAAA 55

25 (2) INFORMATION FOR SEQ ID NO: 1711:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1711:

35

TTTCTGCTTA TTGTCATTCG ATATCGAATT ATTAGAAAGT GCAGATTTTCG CATCAG 56

(2) INFORMATION FOR SEQ ID NO: 1712:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1712:

TAAACCTTTA GGATTGCTGG CAATAGTAGT GCAGTTGGCT GGACTTGTCA TGCCC 55

50

(2) INFORMATION FOR SEQ ID NO: 1713:

(i) SEQUENCE CHARACTERISTICS:

55

- (A) LENGTH: 207 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1713:

5 CAAGAGGATT CGTGCAnTGA ATTCATGGAG ATATTAGAT CTTTCACTGG AGAGAAAATA 60  
 AAAAGAAGAA AAGAGTAACC TTTAGATTGC TGGATnTGTG CAGTGGCTGC TTGCGTGCCT 120  
 TTAGGTGGCA TAAGGAGGCT ATACGCAGAC AACCACCGTC CCGGGGTTTT ATTGTACACT 180  
 10 GTGTAGGACG CAGACTTTAT GTGGTTG 207

(2) INFORMATION FOR SEQ ID NO: 1714:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1714:

TGGTTATCGA CTGCTCGTAT ATTTGACTG TTTTGACTGT TGTTTCCGTA GCAATACTAT 60  
 25 CTCCTAAGCC TTTCATTGGC ATTG 84

(2) INFORMATION FOR SEQ ID NO: 1715:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1715:

GTTTGAATTG ACTGACTTCG TTTTACCGCG TGTTTAATAT TGTTATACAT ATAT 54

40

(2) INFORMATION FOR SEQ ID NO: 1716:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1716:

50 GAAGCCTGTC AGTGGATCAA ATTATTGAAG ATAACCTGGG TGGCATT TTTT GGAAAGTCCA 60  
 AATGCTGGGA ATGGTCA 77

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1717:

GGGCCCTTTT TTTCCCAAAA AAAAAAACCC CCCCAACCCC AATTTTGGnC CCCCTTCCCC 60  
 TTAAAAAATT TAAAAATTGG GCCAAAAGGC CCCCCCAAAA AAAACCCCCA ATTGGAATTG 120  
 GAAAACCATT GGAACCAATT CCATTGAACC AGGA 154

(2) INFORMATION FOR SEQ ID NO: 1718:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1718:

ATTGTCTACA CTGCCACTTT ATTTTCATTA ACCATTTTAC AAATGTGTTC ATCATTCAAC 60  
 ATGAACATCA ATTGTTCAAT TACATCGACA CCTGATGCCT AAnCACGCAC CTTTTGCACA 120

(2) INFORMATION FOR SEQ ID NO: 1719:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1719:

TTCATTTGTT TGTAAGAGTG GCATTTCTAT GTCTTAAAG TGACGAACT TCAC 54

(2) INFORMATION FOR SEQ ID NO: 1720:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1720:

## (2) INFORMATION FOR SEQ ID NO: 1721:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1721:

TTTGGATTAT AAATTGACAT GTAAGTACGA GGCAGCTGTA CCCGATATAT AATTGCTAAG 60  
 AGTTAGGGCT G 71

## (2) INFORMATION FOR SEQ ID NO: 1722:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1722:

TTTTATCTTT ATTACTAAAA CCAACTGCAC CAAAGTTTGC AGTCATTACC ACACGTTTAA 60  
 CACCCGCATG TTCTGCAGCT CTTAAAATAC GTTGTATACC TTCAATTGCA GGCTTCGCCA 120  
 TCACTTCTGC ATCGTCTGTT TTACCGAAAA ACACCGGAGA TGCTACACTC AAGACATACT 180  
 TGCAATCTTT CATTGCTTCA TCCCAATGTn CATCTTGTGA TAAATCCGCT TCGACAAACA 240  
 TTAAATCGCT CTGTGGAAAT GCCCATGTCT TGCATTGTTT nAATTACTTT ATCAGCTTTA 300  
 CTTAAATCAA GnATCGTCGT TTGTA 325

## (2) INFORMATION FOR SEQ ID NO: 1723:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1723:

CAGTATTGCA GTCACGACAA TGTGATGACT AAATTATCCA AAGTATGAAT TCCATGCGGC 60  
 ATTAATCCTA G 71

## (2) INFORMATION FOR SEQ ID NO: 1724:



- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1724:

10 TTGCAACGAT ATTAGGCTAT CTAGTCGGCA TATTTGTAAA ACAAGATCCA ATT 53

(2) INFORMATION FOR SEQ ID NO: 1725:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1725:

ATCTATTCAT CTTCGTACAC GGACAGGAAA TGAGTCCAGT AGATGCACAT TGGGAATTAA 60

25 TCGAAGCTAG C 71

(2) INFORMATION FOR SEQ ID NO: 1726:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1726:

CATCTTGCAG GTCTACATTA TAAATGTGA AGTTTTCTAC GATAACAATT GGGAAACTCA 60

40 GGGGCATCTC C 71

(2) INFORMATION FOR SEQ ID NO: 1727:

(i) SEQUENCE CHARACTERISTICS:

45

- (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1727:

TTCTTTTTTA AAAATTCCCC ATTCTTTTTT AAATTTCTTT CCCGCTGGAT TAAATGGATT 60

TTAAAAATTC CACCCCAACT TAAATTTAAA TGGCTTGTGG AAAATTAACG GGATTGGCAT 120

55

TCCAGCTTAA ATGGTTTTTT TGGAGGCTTC CACGTAAAA ATGGCGGGTG GCTTT

235

(2) INFORMATION FOR SEQ ID NO: 1728:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1728:

TAGAGTGGCT ATAAAGCTAA GTTCAATTGA CCAATTTACA ACAGGTTATT GAGGACAATA

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1729:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1729:

ATCACCAAGA AGTTCTAATG CTTGGTATAA ACGTTGAATA CGACGTTTCG TATT

54

(2) INFORMATION FOR SEQ ID NO: 1730:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1730:

CGTCCCGAAG CGTTGGAGGC GGGAACATCC AGAGTAATTG GCACAGATTA TGACCATAT

59

(2) INFORMATION FOR SEQ ID NO: 1731:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1731:

## (2) INFORMATION FOR SEQ ID NO: 1732:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1732:

TATGTGGTGT TCAATGCAGT GGTCAATTATG GTGCATCTTA CCAGATTCGG CATTCTTATT 60  
 ATAACTATAC TTGTAATAAA TGGCGACATG CAGACACGnC AATAC 105

## (2) INFORMATION FOR SEQ ID NO: 1733:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1733:

TTTACGTTCC ATAGCAAAGT GATACAAACG TCAGCATCAA TGTAAGGCAT AGATCATAGT 60

## (2) INFORMATION FOR SEQ ID NO: 1734:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1734:

TTCCATCATA CATTGCGGTT TTACTTTTCT TCTGGTATGA TCAAATATTC ACATAA 56

## (2) INFORMATION FOR SEQ ID NO: 1735:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1735:

AAATGGGGAT GAAACAGTTA GTGTACAGGT GAAAGCTTAA CAGCAGCTAC AATTGCA 57

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 61 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1736:

GATTTGCAAT TAAACTTAAA TGTAATTTTT CGGAATGTGT ATTTGGTTTA CTTAAAGTAA 60  
A 61

(2) INFORMATION FOR SEQ ID NO: 1737:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 57 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1737:

AAAGAAGCTA AAGAAAAAGT TGATAAAACA GCAAAAGTGA TTATTAGCTA CAGCATT 57

(2) INFORMATION FOR SEQ ID NO: 1738:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1738:

CAATAATATC GCTAAAACCG CCATTTGTAC CAAATGAATT TGATAATGCT GCAG 54

(2) INFORMATION FOR SEQ ID NO: 1739:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 59 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1739:

TAGAGCCCAA CCGGCAACCC ATCCATGGAA ATTCACCAAA ATAATACATT GACCCCAAG 59

(2) INFORMATION FOR SEQ ID NO: 1740:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1740:

10 CCTTTTGGn AATTTAAGGG GGTTCCCAAC CAAATCCCC CAAATTTTT TGGGTAAAA 60  
 AAACCCGGCC CAAAATTTA AGGGAATTTG GAAAAAGGTT TGGTTCCCTT TTTTCCCAA 120  
 GGCCCAAAT TTGGAA 136

15

(2) INFORMATION FOR SEQ ID NO: 1741:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 53 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1741:

CATTCAACCA ACGACTGACA ACAGAACATT TAAGAGTCTA GGACATTGAT TGA 53

(2) INFORMATION FOR SEQ ID NO: 1742:

30

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 52 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1742:

40 GCTCGTCTGA TTCAGTCACA AAATTGTCTT GTTATACTTG TCACCTATCA TC 52

(2) INFORMATION FOR SEQ ID NO: 1743:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 53 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1743:

TGTTATTTAA AGAGGCTCAA GCTTTCATAG AAAACATGTA TAGAGAGTGT CAT 53

(2) INFORMATION FOR SEQ ID NO: 1744:

55

- (A) LENGTH: 94 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1744:

10 TCTGAGTTAA AGACGTCTCA CTAAAGCTT TAGCAATTCC AACATCAGA TATCTTCACA 60  
 CGTGTATATAT GTGTCCATTA ATATATCCTG TGGC 94

## (2) INFORMATION FOR SEQ ID NO: 1745:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1745:

25 GGAAAAAAnn TTTTAAAAA AAGGGAAAAG GGAATTGGGG TTCCCGGCCC CTTTTTAAAG 60  
 CCCCCAAATT AAGGAAATTT TAAATTTTGG GGAAGGGGAT TTTCCACCGG TTAATAAACC 120  
 GCCGATTTTG AGGGGGTTGA ATTAATTGGC CCAAATTTAA AAACCTGGAT GCTGGGTCCA 180  
 30 ATTTTTTACC GGGACCAATT GGTCTGCAT GA 212

## (2) INFORMATION FOR SEQ ID NO: 1746:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1746:

TATCTTCCGA TGAAGAACAA GATGCACAAG AAGTACGCCA ATGATTTAAG AAAGTGGT 58

## (2) INFORMATION FOR SEQ ID NO: 1747:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1747:

55

AAAATTAAGn CCTTTTTTAA CCTTCCCTT CCCCAATTGG GGCCT

105

(2) INFORMATION FOR SEQ ID NO: 1748:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1748:

AGTGCCTATT ACTTTGATTG ATGTCCAAGT TTCCTATCAC ACAACTTAAT TT

52

(2) INFORMATION FOR SEQ ID NO: 1749:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 95 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1749:

AAAGCATCAT CCGAACTCCA ATGATTATAC TCCCTAGATA TTATTATGTG ATGCTTTGAG

60

CATTAATTAG AGATGGGACG ATTCCATGAA AGATA

95

(2) INFORMATION FOR SEQ ID NO: 1750:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1750:

TTGACACATC TACTCACATT AAAAGTAGAT GAAGCGTTGA GATTAAACATT TCCACATTTA

60

CAA

63

(2) INFORMATION FOR SEQ ID NO: 1751:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TCGATATTTG AGACACGCTG CTGTAATAAA ACATCCTATA AAGTATATAC CAAGATCTAC 60  
 CAATATAAAC AGCGGCTATA TGATATAAAT GCTCAGACAC ACCCnCTGCG ATCCAT 116

(2) INFORMATION FOR SEQ ID NO: 1752:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1752:

TATGATTAAG CTTAGTGCAG ATTTGATTTA TTnACAACG CTTCACTACA TTAAAAATAG 60  
 GGCACTCGCA CATATAGTTG TATCAATAGC CTTTATCAAT TTTTGGGAA GGTT 114

(2) INFORMATION FOR SEQ ID NO: 1753:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1753:

AACTTCAAAT GTGCCAAGTG TTGAATCACA TCAAATCAT TTTTATTAA CG 52

(2) INFORMATION FOR SEQ ID NO: 1754:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 75 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1754:

ACTAATCCCT TGCCTGTTTC CAATCAATTG CATTATTAGT GGCCATTGT TTGATATAAC 60  
 TGACAAGCTT TAACC 75

(2) INFORMATION FOR SEQ ID NO: 1755:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1755:

GTGAACAAGG GTAGATGTAA ATAGTTGATG CATGTGTACA CATCATAACA AAA 53

(2) INFORMATION FOR SEQ ID NO: 1756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1756:

TTATTTGGGC AGGCAAATAC CCTTAATATA TTCAAATCAT GTTAATATCA TTGCTATTGC 60

TAAACC 66

(2) INFORMATION FOR SEQ ID NO: 1757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1757:

ATTAATCGGA GCACTTGGGT TCGCAATTTA TGCTGAAATG GATCATTCTA CATCATC 57

(2) INFORMATION FOR SEQ ID NO: 1758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1758:

CGAACAATAA CTCTAAGTAT CCAACAAATG CTGCAAGTGT ACCTACTGTG ATTGATCCAG 60

AAATAGCAAG ATATGCACCA ACACCGATGA CAATAATTGG TCCAATATCT GTAACGTAT 120

TAATTGCGGC AAAGGAATAg GCATTCCATC TTGTATGTTT CAACGCACGT GTTAGGAAAT 180

TAGTATTCTT TTTATCAAAG TTTTTCGCTT CATTGTCTTC AATCGCAAAA CTTTTAACGA 240

CTGAAATACC TTGAACACGT TCATGCAAGA ATCCTTGAAC CTCAGCTAAT GCTTGAGATC 300

TTTCaNGTGT CAATTTTCTT AATCTTCCAA AGAAAACGTA CACCGTTAAA ATGTAAAATG 360

## (2) INFORMATION FOR SEQ ID NO: 1759:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1759:

ATTATGTCA TGCTAGGTCA CTTGCATCAT CCATTAGTA TAGAAGACGA CAAAATTAAA 60  
 TTATAGTGGG CTCCTTGATT GGCAGTATTC ATTTTCGGGA AGCGGGGTCC AGGCTTAAAG 120  
 GGTATTAGAC GTGGTTACC 139

## (2) INFORMATION FOR SEQ ID NO: 1760:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1760:

TCGCCCCCTCC AGGCTATTAT TTCATCTATA TCATTGTCAT CAGTTAAATT CAGCCTCGAC 60  
 ATTTCCATTT CAATAGACTG TTCATTCAAT TCTAAGTCAT TATTGTAAGT TTCTAGTTGA 120  
 TTTTCATAAT GATTAGATT ATTTTGCTCA ATTAACTTTC TTTGAGACAA TTGCATTAAAC 180  
 TTATCTTCAA TCTCCTTTGA GAGTTCTTGA TGCTGATTCA CATCTTGAAC ATACTTCTTA 240  
 TAATCCACCT CAAAATTAGT GATATTATA TATnTCGAGA GTGTTTCAAA TTCAGTGATG 300  
 AGATCTCGAC ATAAT 315

## (2) INFORMATION FOR SEQ ID NO: 1761:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1761:

TAAATCCTCG AGATTCTTAA TAGGGTAGAT ATCTAACGTT TTCGCAAAGC TCTTTTGTAT 60  
 TTGTTCTTCT TTTGAATCTC CAATGATCTT ATTATCACCA TCACAAGATG TAACAAAGAT 120

CCATCCTCAT CATTTCATCAT CTTCATCTAC CTTGCGGCT GGAAATTCAA aGAaTCTATT 240  
 ACTGACAAAT CGCTTTTTCC ACCTTTTGAA AAGTCAATTT CCAACTTTTT ATAACCCACA 300  
 5 GAACTTCCTT TCAAATTACC ATCAATATGC ATTTTAAATA CCGGTGCTTT ATCAGTAGGA 360  
 ATATTATAAC GACTTCTTAA TTGCTTAACA TTTTCATCT 399

(2) INFORMATION FOR SEQ ID NO: 1762:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1762:

20 GTATAGAAGA CGACAAAATT AAATATAGTG GCTCCTTATT GCAGTATTCA TTTTCGGAAG 60  
 CGGGTCAAGC TAAAGGGTAT AGACGTGTAC AATTAATGAT GGCATTATTA ACGATGTATT 120  
 TATTCCTCTT AAGCCACTTA GACAATTGGn AATTATCTCA GGCGAATATA ATGATGTTAT 180  
 25 TAATGAAAAA GTTCATGTGA AAAATAAAGA TAATTATnTA CATT 224

(2) INFORMATION FOR SEQ ID NO: 1763:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1763:

AGCAACCAAC GCCAGATAAA GCAGAAGATA ACGCATTTCC CCCCATCACC ATAT 54

(2) INFORMATION FOR SEQ ID NO: 1764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1764:

50 ATTCCCTTAT CGCATTCTGT AAAATGATCT TCATCAGAAA TTGCTTCGAT ACGTTTATG 59

(2) INFORMATION FOR SEQ ID NO: 1765:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1765:

10 GATTCAATTC ATCTGTATAG ACGATATATC CTGATATGAA TTGGAAATGG AATA 54

(2) INFORMATION FOR SEQ ID NO: 1766:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1766:

ATCGCATAGA AGCATTAGAC TCAAATATT TTCGGTTATG AGAATAACTC TGACATCCAT 60

25 ATGGATACTT AGTTTCCAAG TTAGA 85

(2) INFORMATION FOR SEQ ID NO: 1767:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1767:

CAGTACTGCT GAATGATGCT ATTGATTTTC TCATGAGACA TGGCGATAAC ATCG 54

(2) INFORMATION FOR SEQ ID NO: 1768:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1768:

50 GnCACTACTA ATCGTATCAG GATCACTAAT TAAGGCATCC AGCATCAGAT ACGAGCGCAC 60

GTCAGACTAA TCTACTGTCA TGATAAAGCA GCTGCTAACC TTGTAAGTTC GTGAAA 116

(2) INFORMATION FOR SEQ ID NO: 1769:

55

- (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1769:

10 GTTCTATCCA ATATGGAAAT GAGGACATTA TGC GTGAAAG CTATGGACGA TGGACGATGG 60  
 TACACGCATG TTGTGTAAGC AG 82

(2) INFORMATION FOR SEQ ID NO: 1770:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1770:

25 TATCTGTATT GTAGTAATCC GCTTCTCCCA TCTATATAGG GATCTTTCGT AGATATTCAC 60  
 TTTATGCCTA GGATCCAAGA TGTGTAAGCA GCACTTTGCA TTATCTAATG CAAAGGGnAC 120  
 ATGCGGCTGT AAGCCCTGTT CTGATAATCA TA 152

30 (2) INFORMATION FOR SEQ ID NO: 1771:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1771:

40 TGGAGGCGAA GTAAATGAAA AGTATTACGT TTGAAGAACA TTATGTCATT G 51

(2) INFORMATION FOR SEQ ID NO: 1772:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 232 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1772:

nGAAACAAAT ATCTGATGAG ATATGCAATG ATGACTATAA GTAACATTAA AATGAAGCCC 60

55

CGTACACCAA TTATATCTTT GTGGnTGTTA TATTAAATCT ATATTATGTT CATTTAACAG 180

CATATGTTAA AAATTGACAG TTAACACATG TAGCTATTTG ATGTGAATGT GC 232

(2) INFORMATION FOR SEQ ID NO: 1773:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 108 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1773:

TAATGTCCCC CAGAAATGTAG GCAAATGCAG AACCTGGTTT TAGGGTCAAC TGTTTnTTCT 60

CCAAGCAGAA ACAAAGTTCT TGTGTCAGTG CACTTTTGGT CCACCATT 108

(2) INFORMATION FOR SEQ ID NO: 1774:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 111 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1774:

CGCAATTGAA GGATACACTA TTTTAAGAGC TGCAAACATG CGGGTGTAAC GTGTGGTATA 60

CTGCAACTTT GGTnATTGGT TTAGTATAAG ATAAATCAT CACAATGAAT C 111

(2) INFORMATION FOR SEQ ID NO: 1775:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 73 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1775:

CAGGTTATCA GCTAATAGAT ATGTTGAAGA GGCAGTTGCA GGCCAAATGA AACTGCAGAT 60

GTAGTTCAGT ACC 73

(2) INFORMATION FOR SEQ ID NO: 1776:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 67 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1776:

5 TAGACACAGT GCAAAATCTG GTACAGCTTA TGGGAATTAGA CGGGTAAAGC AAATTACTGA 60  
GTACCCA 67

(2) INFORMATION FOR SEQ ID NO: 1777:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1777:

GTATGCCAGT GTCATTGCTG AAAACATCAA CCATTCCCTG CACCAAAATT TTTTGGTAGA 60  
20 GTTTGATGCT GGCCATCCTC CAAGGGACTA AGGGTAATTT TGnTTAAAAA GAGCCAAAGG 120  
CCCAATG 127

(2) INFORMATION FOR SEQ ID NO: 1778:

25 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1778:

GAACCCAAAA ATTAGCAACA GTGGCTACAA TAGTTGGGCA CTGAAAGCCA GCCAAGTGGG 60  
35 ATTTTGTAGCC CTTGATTGA AAGCGGGGTC CCCAGGATTA AAAAATTAA ATTAGCCTAA 120  
TAAGCCCAAA ATTCCCATTT GGAAAAGGAA ACCTCCTTAA ATTGGGTTGG AAAAAAGnTT 180  
40 AAAAAAAAAA AGGCCAGnC CTTGGAATTT TTTGGAATTG GAAAAAGGAA TTAAAA 236

(2) INFORMATION FOR SEQ ID NO: 1779:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1779:

## (2) INFORMATION FOR SEQ ID NO: 1780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1780:

GACGACTCGC TTCTATTTTA AAATCCGGCG TACTTgGTTA TATAAATATC ATAATGGTTA 60  
AAATTAAAAA GCAATGTCAG TTCACACTAT TACTGACATT CTTTtagTTA TGTGTATATT 120  
ATTCATTAC AAGCTTTTGG TCTATAAATC GAGTGATTG CTTTgTTTGT ATATAACCAT 180  
CTGCTACATA TTCATCGTTC ATTGTAATTA ATGGATAAAA TAGTTCATCn n 231

## (2) INFORMATION FOR SEQ ID NO: 1781:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1781:

GTCTCCCTGC CCCACATTTA ACATTGTAAT TTTGTGATGT GAATTTGTTG GAAACGTTAT 60  
TAATAATGTC AGAATAATTA TAGTCCAAAA CGTAACCAAT ATATATTTAC GTTTAGCCAA 120  
TAACCAAAAT ATGTAATAAA CAGAAATTAT AAATACTATA AATATCCAAT CATTAAACTT 180  
GGGAACAGAA AAATGTGATT GCTTGATTC 209

## (2) INFORMATION FOR SEQ ID NO: 1782:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1782:

GTAAACTTA GTTAGATAAA ATGCAAATCA CATTATTGTA GATAGTCTCT TTTC 54

## (2) INFORMATION FOR SEQ ID NO: 1783:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1783:

TCTGGAATGT CTCCTTGTCT CTCTATATAG CTATAGTCCG TCGCAAGCGG ACGTAATGTT 60

10 CATTTCATA ATGATTATAG TATGAAAGCG CTTTCTTGTA TATGTGACAT GTGCGTGThG 120

(2) INFORMATION FOR SEQ ID NO: 1784:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1784:

CTACCATTTA CATAAAGACC GTCTAATTCT TCAGTTTCAA TGGCATTTTG GAGCAAT 57

(2) INFORMATION FOR SEQ ID NO: 1785:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1785:

35 TCATAACCAT TACCAAGTAT CCAAGCAGCT TTAAACAAT ATGGCATAAA CATT 54

(2) INFORMATION FOR SEQ ID NO: 1786:

(i) SEQUENCE CHARACTERISTICS:

40

(A) LENGTH: 84 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1786:

GGATGGGTGA TTTTAGCAGG TTTGGCTATG AGTACCGTAT TTGCATTAGG ACCGATTTCa 60

TTTAACAAAA TCATAATTTT GGGC 84

50

(2) INFORMATION FOR SEQ ID NO: 1787:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 134 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1787:

CCGGTTTACC CTAAAAATTA TTTTGTGGGG GGTTCATTA AACCTTCCAA TTCCAATTA 60  
10 ACCCCnACCC CCCTGGGTTT TCCTTAAAAA CCAAAGGCC CTTTTTTTC CCAACCAAC 120  
CTTGGGGGAA TTGG 134

(2) INFORMATION FOR SEQ ID NO: 1788:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1788:

TATATCAACT AAAAAGCGCA TCTGCAACCG ACGTTGAAA ATTTGGACAG GAGACAGATA 60  
25 ATGTAATATA 70

(2) INFORMATION FOR SEQ ID NO: 1789:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1789:

AATATCCAAT TATACAAGCA GGTATGGCAG GAAGTACGAC ACCGAAATTA 50

40

(2) INFORMATION FOR SEQ ID NO: 1790:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1790:

50

TGATTTACTA GCTGAATCCG ACATGCTTGA TGATACACTA TGTGAATTCA 50

(2) INFORMATION FOR SEQ ID NO: 1791:

55

(A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1791:

10 CCGGACGCTT TACTTCCAAC TTTAGGTGGT CAACACAGGT TTAAACATGG CGATGTCA 58

(2) INFORMATION FOR SEQ ID NO: 1792:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1792:

20 CATCATCCTC TAATTTAGTC CAAACTCCTG GATGATATCC AAATGAAGTT CCAATTGA 58

(2) INFORMATION FOR SEQ ID NO: 1793:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1793:

35 CACAAGTTTT AGAAGGAAAC CAATAACAAA TGACGAGATT AATTGCCACA AACATTAACG 60

AC 62

(2) INFORMATION FOR SEQ ID NO: 1794:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

45 AAGGCCCGGG GGTTTAAAA AAAAAGGTTT AAAAAAGGnT TTGGCCCTTT AAACCCAAAG 60

50 GGAAATTTTA ACCCCAAAAA AAAAAAACCC CTTTGGGAAA GGG 103

(2) INFORMATION FOR SEQ ID NO: 1795:

55

(A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1795:

10 TATCGATCGA TCATGTCGAA TCGATCTGTC GATCGATCGT ATCGATCGAA TCGCGTCGAA 60  
 TCGAATnCGT CGAATCGATG CTATCGATCG AATGCTATCT GAGTCGAATC ACGTCGATCT 120  
 G 121

15 (2) INFORMATION FOR SEQ ID NO: 1796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1796:

25 AATTCATGTT AAAATCCTCC TGATATTAGA TGGCCCATTT TTATTTTTTTT CGTTTCCATA 60  
 TA 62

30 (2) INFORMATION FOR SEQ ID NO: 1797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1797:

40 CATACTCGAC AATTTAGATG GTGAaTACTT ATCATTTAAG TCCTTTGAcA CCTCATCTAA 60  
 AATTCTAGGA CTTTAAACAA TTTCTTTATA CGTATTTACA AGTTGAATAT TACTTTGAAC 120  
 CTCTTGCGCC ATAAACTGAG GATTGTCACC CTTAGTTTGA TTCACTAAAA TTTGAGTATT 180  
 45 AGCTTGATAT TTAGGTGATA AGACGAAAAA TGTAACAATA GCGCTAATAA TTAAAAATAA 240  
 TAGCGGTAAA ATAATTAAAA TCTTCAAGTT TTTTGTGAAT ACTTCTTTAA TTTTGTAA 300  
 TTCTAATGTA CTTTCCATTA TTTACCTCCC TTAAAAATTT TCATTAAAAAT TGGTATTATA 360  
 50 TATATAGTAT TTACATATTA CATATCGTTT AAACAAT 397

(2) INFORMATION FOR SEQ ID NO: 1798:

55

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1798:

10 CGGGTAACAG CGAATGGTGT GTCACCGTAT ATAACTTTAC TATTTAATAT TTGGCCTGTT 60  
GCTTTC 66

(2) INFORMATION FOR SEQ ID NO: 1799:

15

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 77 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1799:

25 GTTGCTAAGT TTGTATTACA ATTTAAATGA TTTTGTAGCTT GAGTAAGTTT ATTTAAAGAT 60  
GCAGTAATTT CGCTAGG 77

(2) INFORMATION FOR SEQ ID NO: 1800:

30

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 172 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1800:

40 TAATGCTATT TAATTTTCTA CTTCTAAGC TTCCACCCAT AACGAGTAAn ACTTTTTTAT 60  
TTTCATTAAA GCCTGTAAAT TGATAACCAT TATGTGCATT ACCATTTTTT AAATCTTCTC 120  
GAATTGTTGC TCCAATAAAA TCAGCTTTCT CTTTAGGTAA GTAGTTTAGC GT 172

45

(2) INFORMATION FOR SEQ ID NO: 1801:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 140 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1801:

55

AGTAAAATTT GTCATCACGA TCAGCAAAG CTTTGTGATTC TGACGTATCT TCCATAAATG 120

ATCTAAAAAT TGGTAGTTTCG 140

(2) INFORMATION FOR SEQ ID NO: 1802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1802:

ATCCCCCGTA CAGACTTCAG CTTACGTAAA CATGCTGAAC ACTCTAGTGA AGATTTCAAA 60

(2) INFORMATION FOR SEQ ID NO: 1803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1803:

CAATTTAAAT GCATCTTTCC CATTAAATTC ATTTGTTGTC GCTTTAGCTG TGTTAATTAA 60

(2) INFORMATION FOR SEQ ID NO: 1804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1804:

ACTTGATCGA AAAGGTTTCA TACCGGTAAA CGATAAAGTT GAAACAAATG 50

(2) INFORMATION FOR SEQ ID NO: 1805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1805:

## (2) INFORMATION FOR SEQ ID NO: 1806:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1806:

AAGAACTGTC TATGAATATT GGATGACGCT TTGATGAGAA CATTAGTAAG CCATTTGTTT 60  
 AAGGAGTACA 70

## (2) INFORMATION FOR SEQ ID NO: 1807:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1807:

TAGCATTCTTCT AATGGAATCC AATCTTACCG AATGACAATT GGAATATAAC TGGTGATAAT 60  
 GTTGAATGGT CCTGTGA 77

## (2) INFORMATION FOR SEQ ID NO: 1808:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1808:

CCCGGCCCAA AACCCCTTTT TTGGGTAAAA AATTTTTTTT AAAAAGGGAA AAATTTCCCC 60  
 TTTTTTGGTT CCCAAATTTT AAATTAGAAA GGGCCCCCCC TTCCCCCCCCA AATnTTTCCC 120  
 A 121

## (2) INFORMATION FOR SEQ ID NO: 1809:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1809:

5 AAGTTTGGTG AAGGAACCAC GTGCATGATG GTGTTCAAAC AATGCGTTAC GATGTTGACG 60

(2) INFORMATION FOR SEQ ID NO: 1810:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1810:

TGGTTGAGAA AACACAGCGT TAAAGTTGAG GTATTTCAAA AGACAAGTTG GAACATTA 58

(2) INFORMATION FOR SEQ ID NO: 1811:

20 (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1811:

30 CTTAAATAGC AAGTGGTTTT ATAACAAC TT TGAGTTATCT CAATATAGTT ATCGC 55

(2) INFORMATION FOR SEQ ID NO: 1812:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1812:

TAAGTCTTCA ATTTTTTTCAG TTGATACACC TAAGTGATAC AGCCATTCTT 50

45 (2) INFORMATION FOR SEQ ID NO: 1813:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1813:



## (2) INFORMATION FOR SEQ ID NO: 1814:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1002 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1814:

TGGTCATGCG	GGAAATACTA	GGACATGAAA	ATTATGCTAA	AGGCATCAAA	GTAAGTGAAG	60
ATAATGGCGT	AGTGGATATA	GATATGTACA	TTATTGTAAG	TTACGGTGTG	AAAATATCTG	120
AAGTTGCCAA	TAATGTACAA	TCAACAGTGA	AATATACTTT	GGAAAAATCA	CTTAATGTAT	180
CAGTAAATTC	AATCAATATA	TATGTACAAG	GTGTACGTGT	GAATAATACA	GGCAAGAAAG	240
CTTAGGAGGA	CAACTTGAAA	TGATTAGCAA	AATTAATGGT	AAATTATTTG	CCGATATGAT	300
TATACAAGGG	GCACAAAATT	TATCTAACAA	TGCAGATTTG	GTAGATTCTT	TGAATGTGTA	360
TCCAGTGCCA	GATGGTGATA	CAGGAACAAA	TATGAATCTT	ACTATGACTT	CAGGTCGCGA	420
AGAAGTAGAG	AATAATTTGT	CGAAAAATAT	CGGCGAATTA	GGTAAAACAT	TCTCGAAAGG	480
TTTACTAATG	GGTGCAAGAG	GTAACnCTGG	TGTCATCTTG	ncACAATTAT	TCAGAGGATT	540
TTGTAAAAAT	ATTGAAAGTG	AATCTGAAAT	TAATTCAAAA	TTGTTAGCTG	AAAGTTTnCA	600
AGCTGGTGTT	GAAACGGCAT	ATAAAGCTGT	TATGAAACCA	GTTGAAGGTA	CAATACTTAC	660
AGTTGCAAAA	GATGCTGCGC	AAGCTGCAAT	AGAAAAAGCA	AATAATACTG	AAGATTGTAT	720
AGAATTAATG	GAGTACATTA	TTGTAAAAGC	CAATGAATCA	CTTGAAAACA	CACCAAACCT	780
ATTAGCTGTA	CTTAAAGAAG	TTGGTGTTGT	TGATAGTGGC	GGTAAAGGTT	TGTTATGCGT	840
TTACGAAGGA	TTCTTAnAAG	CGCTTAAAGG	TGAnAAAGTT	GAAGCCAAAG	TTGCAAAGAT	900
AGATAAAGAT	GAATTTGTAC	ATGATGAACA	TGATTTCCAT	GGTGTAATTA	ATACTGAAGA	960
TATTAATTTA	TGGCTATnGT	ACTGAGATGA	TGGTTCGTTT	TG		1002

## (2) INFORMATION FOR SEQ ID NO: 1815:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1815:

GACAACGCTA TTATTTT TAG TTTTCAATT CTATTATGTC ATAATTATGT CACTCAAAAA 120  
 CTGTTTTCCA ACATTGATTT ATTGTTGGAA AATCTCGAAA ATCTAGTCTA TTTCTCCAAC 180  
 5 AATCGAAGAT TTATGCCCTT TTTTCTCCCT TTAATAAGT CATAATACGA GGCATACATG 240  
 CAACATTTAC AATAAAATAT GTTCCTACAT CGTATTATAC GAATGCTCAC ACTTATAGTT 300  
 10 GTTTAGTAAA CCCAGATGTA TTGCTAACAT ACCCATnAnc nCTATATAGT T 351

## (2) INFORMATION FOR SEQ ID NO: 1816:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1816:

ATATCGTATC CCATGCGGGA AGGGCTTTAT TTATACTGTG CACGATGAAT GCGCACAACG 60  
 25 GG 62

## (2) INFORMATION FOR SEQ ID NO: 1817:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1817:

AAAGGGGGGA AATTTTTTTT TTTTGGGTTT GGGGGGAAAA TTTTTTTTGG GTTTGGGAAA 60  
 40 TTAAATTAA 70

## (2) INFORMATION FOR SEQ ID NO: 1818:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1818:

CAAGTTCGGA ATGCGAACGC GTCTTAATCT ATATACAAGT GATGCACTCC A 51

## (2) INFORMATION FOR SEQ ID NO: 1819:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1819:

10 TCGCCATACT ATCGACAGCT GCTAAAATTG CGCTCTTCTT GTGTCGCAAT CG 52

(2) INFORMATION FOR SEQ ID NO: 1820:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1820:

CAAATTGGGG AAATTACTAG AAATGAAGAT ATTTATAAAG ATGACTGGAC GTCAACTT 58

25

(2) INFORMATION FOR SEQ ID NO: 1821:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1821:

35

ACTGCTTCAG CACCTGTATT CATTGGGGAA AGCTTTATCG TTGACCGGCC AGTTTACA 58

(2) INFORMATION FOR SEQ ID NO: 1822:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1822:

ACCTGTTGCT CGTGTCATAA ATAGGTGACT ATAAATCTCT GTTCAATATA CTTTTCGTTT 60

50

TTCCAATCTT AAAGGTCGAT GTTCGTGAGT AATCTTATCT CTGGnCCAAT TTTAATGTCA 120

TGATATGTTT ATAGTATCAC CCCTTTGTTG TGTAATAATA ATCAGGTGGG TGGTTAGAAC 180

55

GGTGTGAATA 190

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1823:

AGCnTTAGCh TATGGTTTAG ACACAACTGn TAAAGATGCh AAGTTCTTGT

50

(2) INFORMATION FOR SEQ ID NO: 1824:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1824:

AAAAATTGGA AAAAAGGGGC CCAAAGGTTA ACCCAAATTG GAAAnAAACC CAAATTTTTT

60

GGAAATTAAC CCAAAAATTG GCCCCCAATT GGAACCCAAA AT

102

(2) INFORMATION FOR SEQ ID NO: 1825:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1825:

ACGTACCAAT GTCATAATCA GTCATTTTAC CACTCTTAAT AATCTGCTTC CGGGCAA

57

(2) INFORMATION FOR SEQ ID NO: 1826:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1826:

ACCATCTTGT ACAAAGTGGA TGT CATATGC ACCATCTTGT GTTTTGAGCT GCATTTAATT

60

G

61

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1827:

ACCGTTTCGC CAAGCCGACC TAATTCTCA GCAATATTTT TTTCTACGCC ACCAAT

56

(2) INFORMATION FOR SEQ ID NO: 1828:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1828:

ACTTATAGGG CGCACTTATT TTTCGCTTCC ATAGCGAAAC TAGTGTCAC TATACGTATG  
TG

60

62

(2) INFORMATION FOR SEQ ID NO: 1829:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1829:

GCTACACACG ATTTACCTTT CTTGTCACGT TTGCGACCA TCATTGTGAT GATA

54

(2) INFORMATION FOR SEQ ID NO: 1830:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1830:

GTAATGACCA TCGCTGATTT ATGACATTGT TAGATCTCAT GTGCCATTTA GTCTGCTGAA  
TCTTGGG

60

67

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1831:

ATAACTCTTC GnCAAACCTCC TCAACAAACT TCTTGTGTTC CATCTTCTGG

50

(2) INFORMATION FOR SEQ ID NO: 1832:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1832:

AAACGTnAGA ATATTTAATG GAGCCAAGAA TGGTTTACAG ACGGAGAAAT GGGATATGTT

60

GAAGCGAGGC GTACGCGGAA AGCGTACTAG GCTAGAACAC T

101

(2) INFORMATION FOR SEQ ID NO: 1833:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1833:

TCGTCATCAT GTCTGTGTTA CCAACGTTTG ACGATTTAnT TCATGCnGAA

50

(2) INFORMATION FOR SEQ ID NO: 1834:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1834:

ATAAGTTAAT TGATTTATTG ATAAAGAGAA GCCAGATTTA AATATTATTA AACGT

55

(2) INFORMATION FOR SEQ ID NO: 1835:

- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1835:

10 AAACAAGAAC CCCCATATGG TTAAGCTGCG CGTTTCAACA TACGGGGGGT TTTCATAT 58

(2) INFORMATION FOR SEQ ID NO: 1836:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1836:

TACGTTTTAT AAAAAACAAGA ACTAAAGTAT GCAGTGTGAA TTGTTCACTT TCnTGGCGTT 60

25 GGAATTGATT AAAACGAGAT ATGGTGTGTG GGAAGTTGTT TGTGTTTGCA TATTTTAAAC 120

CGATT 125

(2) INFORMATION FOR SEQ ID NO: 1837:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1837:

40 AATCTACAAT CCTGAATCAC TCGTTAAGAT TAAAAGTATC GACAATGAGT ATCTGAACAT 60

GAGCTCATCT GCCGTTTTTA ATGChAAAAA CCGGCGGCGG GATATTTTIG ACCACGGC 118

(2) INFORMATION FOR SEQ ID NO: 1838:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1838:

55 ATTTGGGGTT TTGGGACCCT TACCCAAAAA TTGGGGTTTG GTTATTAAAA AAAAGCCATT 60

GTCCCAGTTT TTGGGATTGC C

141

(2) INFORMATION FOR SEQ ID NO: 1839:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1839:

TCTGGGGACT AACTATGTCT CAGGCTTTAT GCTGTTATGT TTGAAAATGA AAGG

54

(2) INFORMATION FOR SEQ ID NO: 1840:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1840:

ATTAAAAAAC CTTTTTAAAC CGGGAACCCA AGGAAAAATT CCGGGTTTTA ATTAAAACCT 60

TTTGTTAATT GGTTCCAAAC CAACCTTTTG GGTAAATTTT AACCAGGAAT TTTGGAAAAC 120

nGTTTTATTT GGA 133

(2) INFORMATION FOR SEQ ID NO: 1841:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1841:

AAAGTATGGA TTGATCGTGG AGAAGTTCTT CCTACTAAGA ACACTAGTCG 50

(2) INFORMATION FOR SEQ ID NO: 1842:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



GCGTTTTTCCT GGGATATGTT TGATGAATGG ATGTTGTAAC ATGTTAATAA ATCGTTGGTA 60

(2) INFORMATION FOR SEQ ID NO: 1843:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1843:

CTGAGATGAA TATTGTGTTT CGCCATACAT ACTGGGTAAT ATCCCAACCA TTGCTGTAAA 60

(2) INFORMATION FOR SEQ ID NO: 1844:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1844:

CATTACCTGT AAAAGGAAGC TAAAGACGAT GAGTATTTAT AGAAACCAAT TGCCGACCAT 60

TTGCAGCCAT TAGGAGGGTA GGAGGGCAAT CGCGnCCAAA GGTATTAAAC CGTCAATTAC 120

CTTGA 125

(2) INFORMATION FOR SEQ ID NO: 1845:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1845:

ATCCACCTGG GTTTGTTCTT AATTTAACCT GntAATTAAT TGGGTTGGGT CCGGCAAAAAG 60

TCCGGACCTG CAAATCGGAT TTTATCGTTA AATCTTGAAT TCTATTGCCC ATATTAAATC 120

GCAAAT 126

(2) INFORMATION FOR SEQ ID NO: 1846:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1846:

5 TTTTGGGAAT AAACCAATTA ATCATGGGCA AAAAATAAGC AATCCAAGTA CTTACTA 57

(2) INFORMATION FOR SEQ ID NO: 1847:

(i) SEQUENCE CHARACTERISTICS:

10 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1847:

TGATAAATAT TTCATCTAAA GAGAGGGAGT CATTATGACA CTACTTACTG 50

20 (2) INFORMATION FOR SEQ ID NO: 1848:

(i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1848:

30 ATCTAGGCAA TGAATGGACG GACTTAATAT TGATGTGCAA CAAGAAGAGG AGAAGCGAAT 60

CAATA 65

(2) INFORMATION FOR SEQ ID NO: 1849:

35 (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 244 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1849:

45 CGTGTGAAGT CATTACTTTT AATCCCATGA TGATGGTGAT GGATGAGACG ATATCTCTCT 60

GTCTTTAACA GTTAAGTCCA ATTCTTCCAA CGAAACTTTT CCATAGGTTG TTTTATAAGT 120

TGGAATACTT GCACAAATCA TAcCTAATTG CTTATCAATT TTCTCAAGAC TGTCATCAGT 180

50 TATAAGATCA ATTTTATTAA TAATAATCAT GTCACCTTAGT TTCAACTGAT CTTCCATCAG 240

GCGA 244

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1850:

TTTAAAGGTT CCCGGAAGG TTGAAACCA AACCTTTGCC CCGGCCCCC GGGAAAAAA 60  
 AAAnTTGGTT TAACCCCGG GGGGGGGGC CCTTAAAAA ACCCAA 106

## (2) INFORMATION FOR SEQ ID NO: 1851:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1851:

TTTTTTAAGG CCCTGGGGG GCCAATTTTC CCCCCCCCC AACCTTCCAA AGGTTGGGG 60  
 GCCTTTTTTT TTAAATTGGG GGGA 84

## (2) INFORMATION FOR SEQ ID NO: 1852:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1852:

TCATGATTAA AATTCAACAA TTACAACATC ACTTTGGATC ACATAAGAGT AA 52

## (2) INFORMATION FOR SEQ ID NO: 1853:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1853:

ATAAAACATT TCAAGATGCG CTTGTAATTG TATGTGATAC TGCCAATGCT CCACGA 56

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1854:

AAAAGATCAT GCGCATAATG ACATGGTGAT GATATGAGTA TGATGGTGGG TACA

54

(2) INFORMATION FOR SEQ ID NO: 1855:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1855:

ACAACAAATG GTAATGCATA AACATACAGC CAATAGCTAC AATTGCACGA CG

52

(2) INFORMATION FOR SEQ ID NO: 1856:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1856:

ACGGCTGCAC TCATCATGGT CTGTGGCGTG ATTGTTAATG TTTTAGTTGC CCGCTTC

57

(2) INFORMATION FOR SEQ ID NO: 1857:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 192 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1857:

GCAGATAACT TCCTTGATCC TAACAAAGCA AGTTCTCTAT TATCTTCAGG GTTTTCACCA

60

GACTTCGCTA CAGTTATTAC TATGGATAGA AAAGCATCCA AACAACAAAC AAATATAGAT

120

GTAATAAaACG AACGAGTTCG TGATGACTAC CAATTGCACT GGACTTCAAC AAATTGGAAA

180

## (2) INFORMATION FOR SEQ ID NO: 1858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1858:

CGCTGCACTT CCTGAACGCA GTGAGACCAG AACGTGGTGT CACTTTCGGT CTATTCCGGT 60  
TAAGTGTGG TCTCGGA 77

## (2) INFORMATION FOR SEQ ID NO: 1859:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1859:

TTTGGCGTTC GTGATTTTCT CTAGACGTAG TAACTTTCCC ACTCTTTGCG TCC 53

## (2) INFORMATION FOR SEQ ID NO: 1860:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1860:

TTTCTCACTC GCGCATTTCA GTTTGTTTTG ATTTACCCGT CTCTTCTATT TGTCTTAAT 59

## (2) INFORMATION FOR SEQ ID NO: 1861:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1861:

AATGAATGTA TGCACATTAA CATCATCAAT TAATCCTTTT AATAAATTGA GTTGTAATTT 60

## (2) INFORMATION FOR SEQ ID NO: 1862:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1862:

ATTAATACTG AGCAAATGTG CATAAGACAT CATGAATTAG CACCAATTTA CAGG 54

## (2) INFORMATION FOR SEQ ID NO: 1863:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 89 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1863:

TTTAACCATC ATTCTATGTC AAAGTTTGA AATGATGGTT ATTTTTTATT GCTTAAATTT 60

ATTATTGCTA CTACTATACC AATGAAAGT 89

## (2) INFORMATION FOR SEQ ID NO: 1864:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1864:

AAAGCTGGTA CGCCTGCAGG TACCGGtCCG GAATTCCCGG GTCGACCCAC GCGTCCGGAA 60

CCAAAATTGC ATCTGATGGT CTCAAGGGTC GTGTGTTTGA AGTGAGTCTT GCTGATTTGC 120

AGAATGATGA AGTTGCATTT AGAAAATTCA AGCTGATTAC TGAAGATGTT CAGGGTAAAA 180

ACTGCCTGTA CTAACCTCCA TGGCATGGAT CTTACCCGTG ACAAATGTG TTCCATGGTC 240

AAAAAATGGC AGACAATGAT TGAAGCTCAC GTTGATGTCA AGACTACCGA TGGTTACTTG 300

CTTCGTCTGT TCTGTGTTGG TTTTACTGAA AAAACGGCAA CAATCCAGAT ACGGGAnGAC 360

CTCTTnTGCT GCAGCACCAA CAGGTnCCGC CAAATCCGGA 400

## (2) INFORMATION FOR SEQ ID NO: 1865:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1865:

10

AAATGGCGTA TCTTTATGTA TCAACTAAGT AATCACCAAT TTCTTTCGGA T

51

(2) INFORMATION FOR SEQ ID NO: 1866:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1866:

GTGTTGCGGA TAATCCGTCG ACATTAGCGT CTGAAGGTAT CATGAGGCAA CTGCGCAA

58

(2) INFORMATION FOR SEQ ID NO: 1867:

25

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1867:

35

ACAGCAACTG ACCCAGTTTA CTACCGTCAC TCAAATCACA CAGGTGGTAT CAAATCAATC

60

(2) INFORMATION FOR SEQ ID NO: 1868:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1868:

CAATCTCTTA CCATTTATCT CAGCTGGTGA AAACGGTCCA TTACACTTAG AATAAA

56

(2) INFORMATION FOR SEQ ID NO: 1869:

50

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1869:

5 GCTATAGACT AGAGGTACAG CAAATTCATG TGTACAGTGA TTAGAAGGCG ATGAGCAAAA 60  
GTAAT 65

(2) INFORMATION FOR SEQ ID NO: 1870:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 173 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1870:

20 GCTACTGGCG GGGGATAGTA ACACCCAATG TTACACGTAT ATACGTACGG CTTCTTGATA 60  
AAAAGATGAA GCCnTTACAA GTAGAGAGCG TAAGAACGTG ATCATCTAAA TGGTAAGGGT 120  
AGACTATCCC ATGCCATTGT GGGCGGTTGC ATAGGTACCA CGGCACATAG CGG 173

25 (2) INFORMATION FOR SEQ ID NO: 1871:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1871:

35 GCTGTGGGAT TGTCTTTTGG CATGGGGTTA GGGAGAGCGT TTCTAAGGGG CGTTTGAAAG 60  
CCATTGATCC GTAAAAGGAC CATTGTTGGA AGCnGCCTTA AGAA 104

(2) INFORMATION FOR SEQ ID NO: 1872:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 64 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1872:

50 CCATTATCTC AAGAGGTTCT AGTAAGGGGA TGGCATTTCG TTCTTATGAA TTTGACCAGA 60  
ATAA 64

55



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1873:

GACAACCTAT TGTTTCCCTA CCATACTGTT GTCCGGTTTG ACAAACGGC GTTCCACAAT 60  
 CCATACATCG TGCACCTTGG ATAGAGGCAT CTTCTTTAGT AAATCGTTGT TGATATGCTT 120  
 TATGATGCTT CAAACGGTCT ACCAGTGATA ATTCACCTAA GTACTGTTTG TCATACTTCA 180  
 TAAATCCTTT AAATTCACCC ATCGTATCTC CCCCTTTCCT TAATACACAA CGGCTGGTTT 240  
 ATGTTTAGCA TCGATTGTTT TGA CTGTnCA TCGTAAAATG CAGCTAACAT CGCTTCATCT 300  
 TCCATTGTCA TGTGAAGATT TTGTGGCAAA nGGAATTTTT TGCATCAATG AATnGGTGAA 360  
 CCTTTGGGGG TGACCTT 377

## (2) INFORMATION FOR SEQ ID NO: 1874:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1874:

ATTATCTGAA TACGCAGCAG TTGCAGCACT TGATGGATCA GCAGTATTTA AAAGAGGTTA 60  
 ACACATTACC CAATAGTG 78

## (2) INFORMATION FOR SEQ ID NO: 1875:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1875:

CTAAAAGAAG TTAAAGAGTG TGATGGTAGA ATTATATTAT TTATTGATGA AATgCCATAT 60  
 GCTTGTAGGT GsTGGTAAAA CAGATGGTGC CATGGATGCa GGCAACATGC TAAAACCAAT 120  
 GTTAGCACGA GGAGAGTTAC ATTGTATTGG TGCAACAACCT TTAAATGAAT ATCGAGAATA 180

TGTGAAGAT ACAATT

256

## (2) INFORMATION FOR SEQ ID NO: 1876:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1876:

AGCGCGAAAT TGAGCAAGCG GAACATGCGA CTGATGAAGA AAAACAAGTT GCTTTAAATC 60  
 AATTAGCGAA TAATGAAAAA CGTGCATTAC AAAACATCGA TCAAGCAATA GCAnATAATG 120  
 ATGTnAACGT GTTGAAACAA ATGGCATTGC TACACTAAAA GGTGTACAAC CTCATATTGT 180  
 AATTAAGCCT GAAGCACAAC AAGCAATaAA AGCAAGTGCA GAAAATCAAG TAGAATCAAT 240  
 AAAAGATACA CCACATGCAA CAGTTGATGA ATTAGATGAA GCGAAT 286

## (2) INFORMATION FOR SEQ ID NO: 1877:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 74 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1877:

ACTTCCAAAC ATGATAAAGA CAGACTACTT CACAGGTTTA AGGGAAGCAA CCACATTAGC 60  
 GGGATTCACC CTAT 74

## (2) INFORMATION FOR SEQ ID NO: 1878:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 52 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1878:

TTTCATTAAG TTCAAAAAAT CTCAATAACT TTAAGGATTG GTCCGCATAT TA 52

## (2) INFORMATION FOR SEQ ID NO: 1879:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1879:

ATACCCCTGA GATTAAATTAC TTGTCCTTTT TTTAGAACAA CATCTCCTGG CTTTGTTTCG 60

10

(2) INFORMATION FOR SEQ ID NO: 1880:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1880:

20

AATATCATTA ATAATATCAT TGATGCAAGT CCTATTGTGC ACAACTGGGG TGATTGCCTT 60

(2) INFORMATION FOR SEQ ID NO: 1881:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1881:

35

ACAATGGCAC ATGGACTTAT GCCTGGGGTG TCCTGTTCGT CGCAGCATCA AAATGA 56

(2) INFORMATION FOR SEQ ID NO: 1882:

40

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 121 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1882:

TGCAAAGCAT TGGCACATGG CCAGTCAGTT TTACAACGTC GTGACTGGGA AAACCCGAGA 60

nGCGACGTTG TAAAACGACG GCCAGTGCCA AGCTTGCATG CCTGCAGTCG ACTCTAGAGG 120

50

A 121

(2) INFORMATION FOR SEQ ID NO: 1883:

55

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1883:

ACATTTAATG TATAACCACT TTCAACATTG CCGATTTAGT GGCAGCAGTT GCAGGA 56

10 (2) INFORMATION FOR SEQ ID NO: 1884:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1884:

TGCATCCATT TGATTGAATT TTATGTTTTG ACCAAAGCCG GTTGCAATGT AC 52

(2) INFORMATION FOR SEQ ID NO: 1885:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1885:

TGAAAAGTGG TGGAATGGTG TTAAAAGTTG GTGGGTAATT TTAGAGAAGA G 51

35

(2) INFORMATION FOR SEQ ID NO: 1886:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
40 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1886:

TACACGAACC ATACTCACCA GGTTTTCGTG TCATGAGGCG ATATTTTTTG TCATTTTATA 60

TACATTTATC CAAATTCATC TTTTAAATGT TGAGT 95

50

(2) INFORMATION FOR SEQ ID NO: 1887:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1887:

GCTACCAAAG GCGTTTTACC TATTGCTAGT CACTGCAAGT GGCTTAGCTA TGCAGATCAA 60  
5 CTGGT 65

(2) INFORMATION FOR SEQ ID NO: 1888:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1888:

GTGGGACCAA CTGGCCGGTG ACGGTGGTAA AGGTGCTTCA GTCGTATTGA AGTGGGATGA 60

20 (2) INFORMATION FOR SEQ ID NO: 1889:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1889:

TGTTGGAGAA ACAGTTAACG AGGTTTAATG TTAAAAAAGC AACGTATCAT GGGTATA 57

(2) INFORMATION FOR SEQ ID NO: 1890:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1890:

TGGGATCTGC TTGCAAATAC ACAAACCTTT CTGGATTTTA TTACAATTGC AATATAATCA 60

45 AACA 64

(2) INFORMATION FOR SEQ ID NO: 1891:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1891:

GGCATCCACT CAGATAAAAT AAAGATGTCA AAAAGGCCAAA GATGGTGCTA AAAAAACAA 59

(2) INFORMATION FOR SEQ ID NO: 1892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1892:

GGTATCTCAA CGATCCTTTA GGTAAATTCG GAAATTTCTA CACGTGAGTT AGCA 54

(2) INFORMATION FOR SEQ ID NO: 1893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1893:

TGTCTTGGC AATGGCAGAG CAACAGAAGT TTAAAGTGCT TGCTGATCAT AT 52

(2) INFORMATION FOR SEQ ID NO: 1894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1894:

TAAACCTATA CCCTGTAAAA AGAAAAATCG TGGATCGAAA GAACATGTAT GTGGCATTTA 60

TGATTGATGC TCAAGCAGA 79

(2) INFORMATION FOR SEQ ID NO: 1895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1895:

TTATAAAGGA GAGAAATCCT TAATTATGAA TAAAGCATCA TTTGATAAAA AAGTTAAAAA 60  
 5 GCAATTATGG TTTTGAACA AGAAGGAGAA ACAAGCATTG GATCAACGAT TGTCTTCTAT 120  
 ATCTGATGAT GACAGCGTTA ACTTAAATAA GCCTGTTACC TTTGCTAATG CTTACTTAAG 180  
 ACAAAATGTA TTTGAAATA AAGAAACAAA AAGTTATAGT ATGTTTGTGA CATTAGTAGT 240  
 10 GATGATGTTT GCTTATGTTG CTTTATTAGG TTTGTnTTTA TTTGGGCTAA TTACAAGTCT 300  
 ATCTGGCGTA CAATTTTTTCG TTAGTCCTAA GGTAGATTTA TCTACnACTG TTGTTATTTT 360  
 15 AACAATnATT GGAGCGA 377

## (2) INFORMATION FOR SEQ ID NO: 1896:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1896:

TTAGGATCCG TCTTTGCCGC AGCGTGGGTG TTCCGCGAGC GCTTCTTAGA GGTTTTGC 58

## (2) INFORMATION FOR SEQ ID NO: 1897:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1897:

ATCGCTCAAA CCGAAATTGA AAATGCATCT ATTACTTCAT TAAGCCGTTT ACCAGACGTT 60  
 ATATTAGCAT TGAAAAGTGG AAAGGTTGAA GGTGCTGTAG TTGAAAACC TGTAGCAGAA 120  
 GCATATTTAA AACAAAATCC TAAATTAGGA ATTTCCAATG TGAAATTTAA TGAAGAAGAA 180  
 45 AAAGATACAG TGATAGCAGT GCCAAAAGAT TCACCAAAT TATTGTCACA AATTAATAAA 240  
 ACGATTAAGG AGGTTAAAGA TAAAGGATTA ATCGATAAAT ATATGACTAA TGCTGCAAAT 300  
 GCGATGAATG ATGACAGTGG TTTTATTTCT AAGTATGGTA GTTTTTTCTT GAAAGGAATT 360  
 50 AAGATTACAA TATTAATTTT ACTTATCGGT GTTGCAATTAG GTTCTATTTT AGGTGCATTC 420  
 GTTGC GTTAA TGAAATTAAG TAAAA 445

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1898:

ACCTTTTCAA TGTGCTTTG ATATAAATTC ACAAAGTTGA CTTTThAATT CTTCAATAGA 60  
TTCTCTACTG CGATAGCTGA ATTGCCATCT TTTCTACTAC T 101

## (2) INFORMATION FOR SEQ ID NO: 1899:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1899:

TGCCCTGGAT GCCTTTAACT TGATTCATGA CCTGTGGTTT TATTTCAATT TAGATGAGCT 60  
ACCTTCAAGA CCTTC 75

## (2) INFORMATION FOR SEQ ID NO: 1900:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1900:

AGCAATACGG AACTGATGAA CGGAATTGTA ATACGAGAAT ATGAAGCATC AACG 54

## (2) INFORMATION FOR SEQ ID NO: 1901:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1901:

AGTACCTGAG TATCGCAGAC CGGCTTCAGG TCGTAGAATT TCTATACGTG GAGCTAGAAG 60



- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1902:

GTCTAACTAC AGCATGCCGG CTTATTGTTG CACTTTCTCA ATATTTCAT A

51

(2) INFORMATION FOR SEQ ID NO: 1903:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1903:

GGATTnAAAC GTGCATTAAC GCGTGnTTA AATAGTTATG GTTTAAGTAG

50

(2) INFORMATION FOR SEQ ID NO: 1904:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1904:

ATCGTATTTA TTTCAGCGAG TAGCGGTAGC CTTCAATACA CAAAGATTTT ACC

53

(2) INFORMATION FOR SEQ ID NO: 1905:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1905:

ATAAGACGCT AGATCTGGTC AATTTATTTT CGATTTTTTC AACACTATTC

50

(2) INFORMATION FOR SEQ ID NO: 1906:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1906:

TTCATCTGAA TCGTCGGCTT TCGCGATTAC TTCTTCGTCA GGGTTGCTAT C 51

10

(2) INFORMATION FOR SEQ ID NO: 1907:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 55 base pairs

(B) TYPE: nucleic acid

15

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1907:

CAATTGCTAA TAATCCTTTT AAGTCATTAA TGATTTGATC TTCCGTAATG TTGAA 55

(2) INFORMATION FOR SEQ ID NO: 1908:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1908:

TTGCCAAACA GACATGACTT AAATTTCAAT ATCTTCTTTG ACTGCATCGA TAT 53

35

(2) INFORMATION FOR SEQ ID NO: 1909:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 94 base pairs

(B) TYPE: nucleic acid

40

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1909:

TGAATTTCTA TACAATTATG GGAAGGGTA TTGGTGAATT GGAATGGGCT CCTAAGTTTA 60

CAAGCCCCCA TTCGATGGCC GTTAAAGTTT TTAA 94

50

(2) INFORMATION FOR SEQ ID NO: 1910:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs

(B) TYPE: nucleic acid

55

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1910:

5 AACATGATCG TGGGGGGATG TTATGTTTGT TCATATATTT AGGAAGTCGT TTGTAGTTAT 60  
TGTTTG 66

(2) INFORMATION FOR SEQ ID NO: 1911:

10 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 55 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1911:

20 ATCTTCGCTC CACTTACTGC AATAAGGATT TGC GGCAATC CTAAACCGTT TTTCA 55

(2) INFORMATION FOR SEQ ID NO: 1912:

25 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 59 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1912:

AACAATCGTA ACGATACAAC GCAATCTTCG AAAAATAATG CAAGTGCAGA TTTCCGAAA 59

(2) INFORMATION FOR SEQ ID NO: 1913:

35 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1913:

45 ACACCACACA CACACACACA ACACCCACACA CAACACACAC AAACACACAA A 51

(2) INFORMATION FOR SEQ ID NO: 1914:

50 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 111 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1914:

5 TGTTACGACT TGGTCGACCT GGCAAGCGCT TCGCGCACGT TCTGCAGCnT CTCACCTTATT 60  
GGTATCGCGA TCGCAGCTTA AGAAATTTTCG GAGTTCTGGT CACCTTATGT T 111

(2) INFORMATION FOR SEQ ID NO: 1915:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1915:

TGGTCCGCTC TCAATCGCAT CTTCAGGTTT TACTTGGCAA AAGAGCGCGG TGCTCA 56

20 (2) INFORMATION FOR SEQ ID NO: 1916:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1916:

GCCGACAGTA AAATAAAGGT ACTTGATATA ACATATAACG GAAAGCAACA GTTACTGTCA 60  
CA 62

35 (2) INFORMATION FOR SEQ ID NO: 1917:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1917:

ATGATATTTA TTTGATTGAA GAGATGTTGC TTAAACAAGA AGACGTACAA TTGATAnAAC 60  
GTAAAGATTA TATTCAGCAC CCTAAAGAAA ATGGTTACCG CAG 103

50 (2) INFORMATION FOR SEQ ID NO: 1918:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1918:

CAGTGTAGCG TGTGTCATGC CGTTTTACCA CAATTGAAGA CTGAGCTCTA TCCCTGTGCC 60

(2) INFORMATION FOR SEQ ID NO: 1919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1919:

TCAAATTAAC TTCCAACAAA AACAAATGCA AGGTGAAGAA ATTGCTGAAG AAGATTTACA 60

AAAAGCGCAA GAACAAGCGC AAGCAATTGA AAAAGATGAA AACATCTCTn CATTAAT 117

(2) INFORMATION FOR SEQ ID NO: 1920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1920:

TGCCTAATGA AACATTTAAA AATATTTTTTA AATATATCTA TCAACACATC GTTCTATTAA 60

TTGGGATTGT TAGTTTTCTC AAAGGATTTT TAGGATTTTT CATGGAAAAA AATGGAAGTA 120

ATTTATATTT TGTTTCATTC CCGTTTTTCAG TAGTCGTTGG ATTCTTTATT GTCTTTTTTAT 180

TTATATGGTT TAGTTTTAAA ACAATACAAC TGCAGTGTTT TAACAATTCA AATTGGATAT 240

GGATATTCAC CTATTTAGCA ATCATTCTAC TAATTGTAGG ATTTTTCTAT GTATTCTTTA 300

TTCCACAATC ATTACTTGCC TTTGGACCAT ATATTCAGGT AAGCAATTGG GTATTTATTA 360

TATTTTCATT TATAGTTATG CCTATnGGAT TACGCATTGA 400

(2) INFORMATION FOR SEQ ID NO: 1921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCACAGTCAT CATTThATTT TCGATTTTCA ATAATTGTAT TTTTAATTTA TCTTGATATT 60  
 CATTAAAGATT TATACAAGCT ATCTTTAACA TTGCCTTATC TTTGATATAT TTCTTGCAAT 120  
 5 CG 122

(2) INFORMATION FOR SEQ ID NO: 1922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1922:

AGAAGATACC ATACACATTT aATTAGTTAC AGCATAAATC AATTTATACC CTTAATTATT 60  
 20 ACATTGTTTA TATTTTAAAT TCGGGGGAGT AATTTTAAGT AATATCTTGT TGCTGCTAAT 120  
 TCTATTGTTA ATAAATTGAT ATTAGATGTA GAAATTGAGT GTGAAAGTTA ATAATAGATG 180  
 ATTTAGCTAG TAACATAATT AATTCATATA TAGTCAAAAA GTTCTGTTAG ATACTGTTCT 240  
 25 TGATGAATAT TCTTTGATGT TAGGTGTTAG CTATTCTAGA TGAGTTTCTT AGATGTGGAT 300  
 GCCTGTCTTG ATGAAGTTAT CTATGATGTT AATATAATAC TTGATGTTGA TTCTTAGATG 360  
 TTAGTGCGAT TTCAAGATGC TGATTCTTTG TTGTTGCACT ATCTTGGTGA 410

(2) INFORMATION FOR SEQ ID NO: 1923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1923:

TTTCTATGGT TTATCAGGTG ATTTTACGGA AAACAGTGAA GATTATGGCG TATACCGCTT 60  
 TAAACGTGGA TTAAATGTAC AAATCGAAGA ATTAATAGGG GATTTCTATA AACCAATTCA 120  
 45 TAAAGTGAAA TATTGGTTGT TCACAACATT GGATAAATTA CGTAAAAAAT TAAAGAAATA 180  
 GATGTAAATG ATGTTAGGGC TTATAGThAT TGATACTATA GGCTCTTTTT TATATGTTTT 240  
 TTAATAAAGC CTCGAATAAT GATATATTAA ATGACAAGTT TAACAAGTGA TTGCAATAAA 300  
 50 TATAAAThTG AATTGCACAA CCGATTTGhA AATGATTGAG TTGAGGAA 348

(2) INFORMATION FOR SEQ ID NO: 1924:

- (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1924:

10 AGGGCAGATT TAAGCTAACT TGGAAATGTTT TCGAGTTTTT GAGTTAGTTC TCTATCCATT 60  
 TTTTCAGTTA CATGAGTATA TATGCGAATG GTTGnTTGTT CATCTACATG TCCTACCCTT 120  
 TTCATAATTG CTTTTAAAGA AACATTCAAT TCTACTAATA AAGTTATGTG TGTATGTCTA 180  
 15 AATGTGTGCG TGGTAACTTT CTTATTCATA TTAAAGCTT TTGTACGTTT TCTTAACGCA 240  
 CACCGGCCAT TTC 253

## (2) INFORMATION FOR SEQ ID NO: 1925:

20

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1925:

30 GGTATAGGTG CAAGTCCTAT CTTCCGCTCC ATGGTTTAAT GATAATGCGG GA 52

## (2) INFORMATION FOR SEQ ID NO: 1926:

35

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1926:

TGGTCACTGT TCCTGATGCT TACGTTAGAA TGTAAGATTC CCGATTTATC AGTTATATAC 60  
 TGTTTGCTTC ACTTTGGAGA TCTG 84

45

## (2) INFORMATION FOR SEQ ID NO: 1927:

50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

CTTCTAAAT AATTCTAGTA TAGTTTTAT TCAAATACGC TAGGCTCAGA GCTATT

56

(2) INFORMATION FOR SEQ ID NO: 1928:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1928:

GCAAATTGTC ATTAGACGGA GTATTATTTA GAATTTTCGG TGATATCCAC CGGCACAAGA 60  
 TCGATGTTGG ACAATATCTA ATATACTGAT ACGCATTTAA ATAGAAGAAG GGAATTAGAG 120  
 TTTGGTThTG AATGCAAA 138

(2) INFORMATION FOR SEQ ID NO: 1929:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1929:

ACATCTTTAT ATGCTTCAAC ATCAAATACA CCACATATTG GTAAACAACA AA 52

(2) INFORMATION FOR SEQ ID NO: 1930:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1930:

TTTAATGTTT ACAACACCGG AATAATAATA ACTAAAGCGC CGCTAATAAA T 51

(2) INFORMATION FOR SEQ ID NO: 1931:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



ACGAAAAATA AATAATCATT TCACCTTTAT AGCCAGTATT TTTAATTAAT ATATTTTCAT 60  
 CTATTAGCGC TTCTAAAAAT CTATTGACT TTTGAACATA CTCTTTAGCT ATATTATTAA 120  
 5 CAACAGTATA GGATTCCTCA TAATTTAGTT GATTAAATTC TGAGTCGTTC ATTAATTCAA 180  
 CTAATCCTTT TATTACTTTT TGTACAACAT TAATATTTTT ATCAAAATCA AATTTATCTT 240  
 CCTTAGATAA ATTAATAnnn AAAGTCTTAA GAACATTTGT AAATAGCTCT GCAACACTTA 300  
 10 TAGTTTGGnC AAATTCCTTA AATTTATTTA CACAGTACTC ACACATTAGT TTTAAAAATA 360  
 ATGGATTGTT GAATTCTGGA TTTAATATAG GTAACCTAGG 400

## (2) INFORMATION FOR SEQ ID NO: 1932:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1932:

25 ACTTGCGGAA nGACGCAACG TTTATGTACG TTGGAAGAAA AATTCAGGAC TTACGTTCAA 60  
 AACTACCATA GCAATATGCA TTGAAAGATG ACAGTATGCG 100

## (2) INFORMATION FOR SEQ ID NO: 1933:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 61 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1933:

40 CGCTCTGCTT TAAGCGTTGG GACTTTGTCA ACGGTAGTGG ATGGGAAGTG GTTCTGCTTT 60  
 G 61

## (2) INFORMATION FOR SEQ ID NO: 1934:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1934:

## (2) INFORMATION FOR SEQ ID NO: 1935:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1935:

ATGTATTACG GTTTAATTAA GCCACATACC AACAAGATTG CATTTATGGT ATCTCA 56

## (2) INFORMATION FOR SEQ ID NO: 1936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1936:

TCGCACCAGA AACAAGGGAT TGTTAAAATT GCGTAAATCC TTAAATTTAT TTGTAAATAT 60

A 61

## (2) INFORMATION FOR SEQ ID NO: 1937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1937:

ATGAATAATC ATATTTCTAA TCAAAGTAAT AGCATTTATA TTGTGTTTAA A 51

## (2) INFORMATION FOR SEQ ID NO: 1938:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1938:

TTGCTGAAGA TAGAGGCTTC ATGAAGGTGG AGAAGTTAGC TGATTTCTGG AACAGG 56

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1939:

ATCTCAATGT ATTCTCTAG TGTAAGTTCT TCATAAATAA CCGGTGATT C 51

(2) INFORMATION FOR SEQ ID NO: 1940:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1940:

CTCAGGTCGA CTCTAGAGGA TCCCCTGTTA AATAAACTT CTTAAGCACA TACTTATTTT 60  
 ACTATGCCTT TTACGTTCCC CTTATACTTT TCTCACATCT TTCTCTTAGA CTACTCCCTT 120  
 ATACGCCCCG CTCAATATCT TTAATCATTT CATCTACAGT TATTTTCGCA CTCGTTAAGA 180  
 CAATAGGAAC GCCTGGCACC TGGATGCGTA CTTGCACCTG CAAAATATAW ATCTTTATAA 240  
 TCTCGCGATA CATTyGTGG ACGATAATAA TTA CTTTGGC CTAAAGTTGG GCATTAAACC 300  
 GAATGCCGAA CCAAATTC 318

(2) INFORMATION FOR SEQ ID NO: 1941:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1941:

CCGGGAAAAT TTTTGGAATT AAGTGGAAAA AAAATCCCCT TAAAATTCCC CTGGCCA 57

(2) INFORMATION FOR SEQ ID NO: 1942:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 378 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1942:

5 TGTTCCTCTT TTGAATCTGT TTTATTCGTT TGTTCCTCTT TTTTCTGTTC ATCTTTCATA 60  
 TTTCCACATC CCCCAATAAA AATGATTAAA AGTAATACAC TCATGTACAA AGCAATTTTT 120  
 TTTATATACT CCATCATTTT ACATCTCTCT GTTTTAATTT TATAAACATT TGAATATTTT 180  
 10 ATACAACTTA TAAAATAGT GATTATTCAA CTTTATGTT ATCAAACAAA ACTAACTTAT 240  
 TCAATTTAAT ACATGTAATT CATTTTAACT TTATTATTAA ATGTTCTAAC GTnATTTTTT 300  
 ATATTAGTAA TTATATTTAT TTATCCTCGC TTGGATTAAA GTAGATACTA TCTGTGAAGT 360  
 15 AnATATTTTC TGCCTTGn 378

## (2) INFORMATION FOR SEQ ID NO: 1943:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1943:

AAGAAGAAGT CAAAATTCAG CTAAGTAAAA GCTCGAGTTA TAAAAAAGTC TAAATTGATT 60  
 30 CAACAGGAGT AGAAAAGGAA ATTAGTCTTG CATATTTTAG AAAATGAATA AAAACAGTTA 120  
 CTATATGCAA CTCAAGAATT AAATATTATT TAAGCCACAT ACCTATTAGA GTACAAAATA 180  
 TACAAGTTGT ACTTATATCT AGGTATGTGA CTTTGTATTT TAAGCGTAAA GTAAAAGTTT 240  
 35 TTATGTTTGT ATTAGTTCTA AATTATTTTG CACTTGGATG ACACGTATTT TTGAGTTTAA 300  
 GTGGTGACTC AAGTTCAATA AAATAAATAT CAGATAGGAT AATTTGAnAA TnATATGAAA 360  
 40 GGGTTATCTC CAAAATnATC TCCATATTAT AAGG 394

## (2) INFORMATION FOR SEQ ID NO: 1944:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1944:

50 TATTCGTGAT GACGATTGTC GGTGACATGA AGTTCTATTT GCTGGCACTG AT 52

## (2) INFORMATION FOR SEQ ID NO: 1945:

- (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1945:

CGTTTAAAAA ATGATATCAA TCTTTATTGT GGATTGCAAC ATCCGTGTGC TCCATAAAAC 60  
 GTGTGGCGAG ACTTGGGAAA GG 82

(2) INFORMATION FOR SEQ ID NO: 1946:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1946:

GTATTATTGA TGAAGAAACA GCTCTCCAGT TGTAGATGCA TGCTACGTTC ACGTTACCAC 60  
 TGTATCAATT 70

(2) INFORMATION FOR SEQ ID NO: 1947:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1947:

TATCACCAGC ACCAAGGnTA ATGACATGCT GATCTTTTGC AGTTATGGTh 50

(2) INFORMATION FOR SEQ ID NO: 1948:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1948:

ATTGTATGAA TCTTTGGGGA ATGAACTTTn AACGAACGGA CATCTTGCAA TGACGCATCA 60  
 AAATGGTTTT AACACATGTA ATCGGCTCTC GGTACTATTTC GTGTGATGTA CACATGG 117

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 64 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1949:

TTTGATGATT TCGGGATGGA TTGGTATTGT GGTGAATGAA TTTTITTAGCT CATCATCAAA 60  
TTAG 64

(2) INFORMATION FOR SEQ ID NO: 1950:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1950:

CTCTAGTGGC CATTCAATATT TGTCGCTGAA TGATGTTGGT ACATCCATTG CTGCTGT 57

(2) INFORMATION FOR SEQ ID NO: 1951:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1951:

CTGTCCTTCT GAAACTTGGG TATTTAATTA GGAATAGTTA AAAAAATCAT TCACAGAAAC 60  
ATTTAATA 68

(2) INFORMATION FOR SEQ ID NO: 1952:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1952:

TTAAATTAAC CTTAAGGTTG GnatTTTTTAA CCCCCAAATT TTTGGGGTGG TTAAAATTCC 60

## (2) INFORMATION FOR SEQ ID NO: 1953:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1953:

GACATTTACA CCTGCTTCAA TCTGGTCCAG TGCAGCATCT AATTCTTCGA 50

## (2) INFORMATION FOR SEQ ID NO: 1954:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1954:

ATTGGCCAA CTGTTCAACA CGGTATTGGT TCAATGCAAC ACTTTATCAT TGCTTCAGGG 60

CTATATCGGT GGTATGGGnT GTATCACTTC TTAGAACGTG GTATTAA 107

## (2) INFORMATION FOR SEQ ID NO: 1955:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1955:

GAAGTGAATA TGAAGCTGCT AAAGACTCCG GAATGCTACC TCAGACAACT GATG 54

## (2) INFORMATION FOR SEQ ID NO: 1956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1956:

ATGATTATTT TAGTTCATT TGTTGAGTCG ACTGCTAAAG TTCCATTAA ATGTTGTACA 60

ATAAGCAGTA ATTTATGATT GTTTACAGTT TTTAATTTAC CATGAACTTT TGAAGCATT 180  
 GCATGTTTAA TAACATTATT TATCGCTTCA CGCGTAATCA TAACTAACAT AGATTGTTTA 240  
 5 GTAGGACTTA ATACTTGC GC TAATTCTTTA TTTTCAAATG TAAAATCAAT ATCAGCATCh 300  
 nTnAAAACCTT TACGTATACT ATCAATCTCT TCAATAAATG ATGGTAATTT TACATCATCA 360  
 ATAAT 365

(2) INFORMATION FOR SEQ ID NO: 1957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1957:

AAATAATGTC AAAAAAGTTA AAGATACTAA TATTTTTCCA TATACTGGTG TAGTTGCTTT 60  
 TAAAAGTGCA ACTGGATTG TAGTTGGAAA GAATACTATT TTAACAAATA AACATGTGTC 120  
 25 GAAAAATTAC AAAGTGGGCG ATCGTATTAC TGCACATCCA AATAGTGATA AAGGTAATGG 180  
 TGGTATTTAT TCGATTAAAA AGATTATTAA TTATCCAGGT AAAGAAGATG TATCAGTCAT 240  
 30 TCAAGTTGAA GAGCGTGCAA TAGAACGTGG ACCAAAAGGC TTTAATTTTA ATGATAATGT 300  
 AACGCCATTC AAATATGCGG CAGGGGCTAA AGCTGGTGAG CGAATT 346

(2) INFORMATION FOR SEQ ID NO: 1958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1958:

TTTTCCAGTT AATTTTTCCA GTTCACTAAA TACTTTATTG ACTGTACCAG ACCCAATAAT 60  
 45 AATTTGGTAT TGTCCCCCAG TAGAAAACGT CCCTTTAACT ACATCCATAT TGTTTAGCGC 120  
 CTCTTCATTT ACTAACTTT CATCATTTAA AACTAATCGT AGTCTCGTTG CACAATGCGC 180  
 50 CATTGCATCT AAATTCTCTT CTCCGCCTAT CGCGTTCAAA ATTTCTTCTG CGGATTGCTT 240  
 ATAATTCATA TATTAGCCT CCTAATTAGA ACCGGTTCCA TTTATTCCAC TTTATTGTAA 300  
 CCGGTTCCAA AAATATTTGC AACACTCTAT TATCATTTTA TATAAACACC TACACCATT 360



## (2) INFORMATION FOR SEQ ID NO: 1959:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1959:

GATTGCATAT AATAGTAAAA ACATTACATC TTGAACAGTA CTCGTTTTGT

50

## (2) INFORMATION FOR SEQ ID NO: 1960:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1960:

AATTGAACC AGACACTGAT ACAAGTCACA CCCAGAACT TTAAAGGACG TAAATGT

57

## (2) INFORMATION FOR SEQ ID NO: 1961:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1961:

AACGCTATAT TAGCGATATA CAATGATGCC ATTATCAATA nTACAnCTGn

50

## (2) INFORMATION FOR SEQ ID NO: 1962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1962:

TACAACGTCA GTTGGCAGAC ACCAGAAGAA GGATTCATAA GTATATTCAG GAACTTGTTA

60

## (2) INFORMATION FOR SEQ ID NO: 1963:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1963:

10 AATTTTCCC CCTTTTAAA TTTCCAAAA AAAAnCCCCC AAnAAAAAAA 50

(2) INFORMATION FOR SEQ ID NO: 1964:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1964:

CAACAAGTAG ATGCATCAGA GAGTAGTGT CAAACGTAA TAGATGTGGC ATG 53

25 (2) INFORMATION FOR SEQ ID NO: 1965:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1965:

35

AGCAAAGGCA TAACTGCTAA TGACCATGTA AATGAGACGA GTCGATCGTG GCCA 54

(2) INFORMATION FOR SEQ ID NO: 1966:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1966:

CTCAAATAAC TGGCTCAACT CAACCGGTCT ATAACACCAT AACACCGCAT GCCACTCTAG 60

50

CATACTCAAT CGCTCTGGTA CCAGCnCTCA AATAACTGGC TCACGCCAAC TGTCTATAAC 120

ACTAACACGC ATGCACTCTA GCCTACTCAG AGCTCTGGTA CAGCACTCAA TAGCTGACTG 180

55

TCACAGTCCA CACACACTCA ATACTGGCTG ACACAGTTCA CACACnGCTT ACTCGCTCTC 240

## (2) INFORMATION FOR SEQ ID NO: 1967:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1967:

CAGTTTAAAC TCGATGTTGT GTACTACTGT GCCAGCTGGA ATGTTTTATA ATGGTGATG 59

## (2) INFORMATION FOR SEQ ID NO: 1968:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1968:

GTTACATGGC ATCAGCCAA ACCTGTCTAT AACACCATAA CACGGCATTG CC 52

## (2) INFORMATION FOR SEQ ID NO: 1969:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1969:

ACAATTTTAA TTATATAACT CCAGGGGCTA CAGTAATACG ATTTCTCCAG ACTCCAAA 58

## (2) INFORMATION FOR SEQ ID NO: 1970:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1970:

TGACGTATAA TGGATGAAAG TCTATTAAGT TTAAGAAGCT AATACTGTGA AATCTTTCT 59

## (2) INFORMATION FOR SEQ ID NO: 1971:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1971:

10 TATCATGTTA TCTTCAATCG TTCACCAACA GTCATTTGCT GCATCAGTAA CG 52

(2) INFORMATION FOR SEQ ID NO: 1972:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1972:

TTGCTGGTGC CATAGACTAC ACTTGTTTGA TATCAGAAAT GGGATCTGTT CCATTACC 58

25

(2) INFORMATION FOR SEQ ID NO: 1973:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1973:

35

AGTTAAACCG AGTCCAACCC AAACCTCCAA TCCACCTAAT GGTAAAAATT CCAAACCATT 60

ACCAGGGAGG GACCAAAAAA CGGAATGGGG CCTATTGGTA GGGTACCTAT CCCATTAAAA 120

40

AATCCATCCA AAAGCCCAaA TTATCGGACC ATTTTCGCCA AAAATAATTT AAGCGGAAAT 180

TGAATACCTT AAAATTCTCh GGGCCCACT 209

(2) INFORMATION FOR SEQ ID NO: 1974:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1974:

55

ATCTGAGTAT TTATAACATA AATCACTAAT ATCGTTATTA CATAGGGATA GGGTAAAAGT 60

## (2) INFORMATION FOR SEQ ID NO: 1975:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1975:

TTCTGTCATC CGAGTCTGAA TCGCTGTCGA ATCACGTCGA GTCGATCGCT ATCAGGTCGA 60  
 GTCGCGTCGA ATCGnTCGCT ATCGAGTCGA TCGCGTCGAA TCGAATCACG TCGAGTCG 118

## (2) INFORMATION FOR SEQ ID NO: 1976:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1976:

TTGCAACnTT TGATCTAGAT ACTACCTTAG TTGGATTGTA CTACTTGATT CTACTTCACC 60  
 TTTAGTTGGT TTTGTAGCAG GCGTTTTGTC TTTACCTGAC TCACTAGATG CGTCATTTTC 120  
 TTTTCAACA CTTGGTAATT GTTTATTGTC ATCTTTTGG CTGTCCTGTT TTTGTGATTC 180  
 TTTTCAACA GGTGATGGTG TTGGTTTGCT AGGCGTACTG GAGTAGCTTC CTTCTTAGCT 240  
 GAGTTATCTT GTTGTTCTTT TTTGTTAGAT TTATCGGTAT TGGCTTTTGT AAATGCTTCT 300  
 nTATCAACGA TTCTGACATG GTATTGTCCA TCATAATCAA TCGTTTTTAC GTGAACTTTA 360  
 ACGATAGCAT CATATAGAGT TTACCTTCAA CATATGGGAA 400

## (2) INFORMATION FOR SEQ ID NO: 1977:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1977:

TAGACAAAGA CAGTAACAGT AAAGTACGCT TCAGAACTGA TGGCTCACTG CGAGTATAAA 60  
 AACTTGTAGT GTCC 74

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1978:

ACTCAAAAAC TCGGAAAACA TTCCAATTTA GCTTAAATCT GACCCTTTTT TTGACCCTTA 60  
TATTTTTTTAC AA 72

## (2) INFORMATION FOR SEQ ID NO: 1979:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1979:

ATGTCATTGG CTTTGAAC TT TATCTTCAAG CACCCAATCG TTTTAACTTT TCAAAATTTG 60  
GCACCATAA 69

## (2) INFORMATION FOR SEQ ID NO: 1980:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1980:

CAGAGAGTTG TCGCTCATTA AACGCCACnT GATGAGTTTT CGCTTACGAA GTGCCACGCG 60  
GTATGGATAA TTTTCACCTG TTGCTGAGTC TTTGATAAGC CTCGACTGT 109

## (2) INFORMATION FOR SEQ ID NO: 1981:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1981:

## (2) INFORMATION FOR SEQ ID NO: 1982:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1982:

GAATCTGTTT AAGTTAGAAT TATCCCGGCA TAATGATAAA GGCGAGTAAA TGG 53

## (2) INFORMATION FOR SEQ ID NO: 1983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1983:

GnCTTTTGA TAAAGAAAA TTCATCAATA GAAAAACCGT CTTTATCGTC TATTTTTTTA 60  
 ACTAGTAAGT TCGGCGTTCT TAGAGACTCA AATATTGATT TTACGTTTTT CTTTGTTACA 120  
 CCACTAACAC TAAATATTCT TCCATCTAAA TCTACTAATT CTGGTACCGC AAAGACATCT 180  
 AAACCATGTG TTTTTTCTTT GTATTTATTT TCATCTTTTC CCAATAAAAA CACTTGGAAC 240  
 TTTTGATTTn GT 252

## (2) INFORMATION FOR SEQ ID NO: 1984:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1984:

CGTGTTAATC AACTAATTCT TAGTTTTAAC TGTCGTAATA ATCAACTGAA CACTTTCAAT 60  
 CTA 63

## (2) INFORMATION FOR SEQ ID NO: 1985:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1985:

5 TCCTAAAATG ACCGCTAATG CCTATGGATT GTTATCACCG ACCGCAGGGA CAGCACGACC 60  
TAC 63

(2) INFORMATION FOR SEQ ID NO: 1986:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1986:

GGCATATAAA AATTAGAGAA ATTATTTCAA ATGAACAGAT AGAGGCACAA GATGAATTAG 60  
20 TTAAACGATT AAACGATTAT GntTTAAATG TCACTCAAGC AACTGTTTCT CG 112

(2) INFORMATION FOR SEQ ID NO: 1987:

25 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1987:

TTTATCAATT TGTAACGAAC ATGAATTACA TGTTTCAGGA AAATATATTT CATCCCATTT 60  
35 TTAAAAAGTA TAAGATTTTA TGAAAAATTA AACCAATTAA GTATAA 106

(2) INFORMATION FOR SEQ ID NO: 1988:

40 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1988:

AATGGCGTAG TTACAGCATT TATGATTGTG TTAATCTTTT CTTCTGATAA ACATAATCTG 60  
50 TTTGACCAAA AGTATTTAAG TGTTCAATTA ATTAGTTTTA TTATTTACGT CGTATGGCAA 120  
GTTTTATTGA TAATGTTTTA TTATCATTCA AAACCAAAAA ATAATTCATT TTCAAAATTT 180



TGGTTAGGTG GACATCAGAT TCACTTCCAT GAAAGTAAAT TAATTGAATT TGTTGGTTTC 300  
 TTAGGAATTT CTTATGTTAC ATTCAAAAGT GTGCAGTTAA TTATGGAAAT TCGTGATGGT 360  
 5 TCTATCAAAG AAATTAAAGT ATGGAAATTA ATTCAATTTA 400

## (2) INFORMATION FOR SEQ ID NO: 1989:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1989:

TTCAGCTTAC AATAATGAGC AGGTTGGGGT GGGCTCCAAC GCAGAGAATT TCGATAAGAA 60  
 20 ATTCCACAAA TAATACAAGT TGGCCCACTC CCATTCTGTA ATAAATATAG GAGGTCATTG 120  
 TTATGCAAAT AGAACTTACT GATGCAGCAG TAACTTGGTT TAAAAATGAA CTTGAGTTGC 180  
 CTGAAAATAA TAAAGTGCTC GTGTTTTTTG TAAGATATGG TGGCGAATTC CAACTCAAGC 240  
 25 AAGGATTTAG TCCTGCTTTT ACAGTTGAAC CAAAGGAAGA TGTTGATATT GGCTATGAAC 300  
 AACAATATGA CGATTTAAAT GTTGTCGTAG CGGAAAAAGA TTTGTGGTAC TTTGAAGATG 360  
 ACCACATTAT TGTAAATGTA GTTGTCACGA AGATGAATTT 400

## (2) INFORMATION FOR SEQ ID NO: 1990:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1990:

CAATTTATTA TGTAATAAT TATAGCATTG ATGAACAAGG CGCTCAACGT AATATACAA 60  
 TTAATGGATT GTTTCACAAG ATGGTAAAGC TAGGATGTCT TTTTATTAAG A 111

## (2) INFORMATION FOR SEQ ID NO: 1991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TAAACAAATT CATCAATTGT TAGTGGCATA TCCTAATGTA ATTAGAGAGG AGTT

54

(2) INFORMATION FOR SEQ ID NO: 1992:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1992:

GAACGATAGA TTGATGAAAA GTTTAAAAAA GTACGTATAT GTTTATTAAG TTTGAGTTT

59

(2) INFORMATION FOR SEQ ID NO: 1993:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1993:

CGAGACCAAA ATATTGGAAC GAATAATTTT AGTGTTTTGC TCCTTTATTA TAGATTCAAG

60

CTATGGATAA TAG

73

(2) INFORMATION FOR SEQ ID NO: 1994:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1994:

ATCCATACAA ATGTAACAAG CACAATTGCh GCCATACTTn GCATGACAGT

50

(2) INFORMATION FOR SEQ ID NO: 1995:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1995:

## (2) INFORMATION FOR SEQ ID NO: 1996:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1996:

TCAnTTAAAnA TTAATGTnCG TTGGGGCTCT AATAAAATTT GTTTACAACG

50

## (2) INFORMATION FOR SEQ ID NO: 1997:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1997:

TCATGATTTG AAATGACTTT CAATGACTTG GGTGGGACAC TTGTTGCACA GCTGGATGTG

60

C

61

## (2) INFORMATION FOR SEQ ID NO: 1998:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1998:

CATGCATTGA TGnTCTCAAA GAACATGATG AAACAGGTCA nCACATGnCA

50

## (2) INFORMATION FOR SEQ ID NO: 1999:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1999:

GGTTCGCTAC TGATTGGGTA TACATCTGAT TTAGCAATCT TGCGCACTTG TT

52

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2000:

ATGTGGTTAG ATATCTGCAC ACTTGAACGT TATTGTGGGA TATACTTGGC CAT

53

(2) INFORMATION FOR SEQ ID NO: 2001:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2001:

ATCTCAGTAA GGGTAAGCGT CAAAGTCTGC ACGGATGCTA ATGTTTACCA GGTT

54

(2) INFORMATION FOR SEQ ID NO: 2002:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2002:

CTAAAGATTG TAATGCTTGA ACAATTGGTT CAGTGAATTT TTGAAAATTG TGGAAACTGT

60

TACCATCATC ATCTGTTATA AAACATAAGT TTAAATTGCC AGTATCATGA TAAACAGCGC

120

CACCACCAGA AATTCTTCTT ACTACATCGA TGTTGTGAGC ATCGATATAT GTCTGATTTA

180

CTTCCTCTAT CGTATTTTGA TTCTTTCCAA CAATGATAGA TGGTCTATTT ATGTAAAATA

240

AAAAGTAACT TTCTTCTGCT GGTAAATTTT TTAAACATA TTCTTCCATT GCTAAGTTTA

300

AAGTTGGATC TGTAATATTA TTATTACTAA TGAATTTTCAT TACAATCTCT CCCTTATATC

360

TATATATATn CTCTACTTAT TTATGCCTTA ACTTTGCTCA

400

(2) INFORMATION FOR SEQ ID NO: 2003:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2003:

CCGAAATAGG ACGGGCAGTT GGATTTATTC GAAATGGGTG GCGTTAATAT ATACAGT

57

5 (2) INFORMATION FOR SEQ ID NO: 2004:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 112 base pairs

(B) TYPE: nucleic acid

10 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2004:

NAGTAGTTGA AGGCGACCGC GGTCCACAAG CTGCAAACGT TGTAAACTA TAATTCTTAG

60

ATTTGAATCA TTGATTTTAA CTAACACCTT ACCAAGAAGT AAGGTGTTTT TA

112

20 (2) INFORMATION FOR SEQ ID NO: 2005:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

25 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2005:

30 AAATCTTGAC ATAGGCACAG GAATGTATAT TGATCTCGAT CACTTAAGTC

50

(2) INFORMATION FOR SEQ ID NO: 2006:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 115 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2006:

AAGGTGGGTT TAAATTTCCC AAAAAAAAAA GCCTTTTAAC CTTTGGGGG GTCCCCCTTC

60

45 CTTGGAATTG GAAAGGGGCC AAAATTGGAA TAAGGGGnTT GGAAAAACCC AAGCC

115

(2) INFORMATION FOR SEQ ID NO: 2007:

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 105 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2007:

TGAAGAAATA GCAAATGAAC TCAATATTTTC TATTGAACGT CAATATTTCA ACCAATTATA 60

5 TCGCTTCAAT AATCAAGATT TAAAGCATCT TGAACAAGAn TTTGA 105

(2) INFORMATION FOR SEQ ID NO: 2008:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2008:

ATTGGCTACT AAAGTTAAGG ACATGATGGA TTGGATTAGT GGTATGCGCT TTGAAAAGAT 60

20 CAATTAT 67

(2) INFORMATION FOR SEQ ID NO: 2009:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2009:

TATAAATTAG CGTCCTTCAT ATCACAACGA TGATGCTCTG TCGGAAGATC TGATTTATTT 60

CAATGTGCGC ACG 73

35 (2) INFORMATION FOR SEQ ID NO: 2010:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2010:

CTTTGTTTAT GTTTCGTTTA ATTTGTAACC CTCTCTTTGG ATACCGAGGT T 51

(2) INFORMATION FOR SEQ ID NO: 2011:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2011:

TAACGACCAA GCTTAAAGAG ATACGCTCTT ATGCGATTGG ATAGGTCGTT AAAGTTAACT 60

10 ACAATACCTC ATAAGTAGAT TTAGAATC 88

(2) INFORMATION FOR SEQ ID NO: 2012:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2012:

GTCAACCCTT GCCAAGCTTA TATCAGATA CTGGGATGTG ACTTCCGGTG AATTAC 56

(2) INFORMATION FOR SEQ ID NO: 2013:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2013:

35 AGCTTATAGT ACTTGTGACT TCATAATGGA TGAAGTTGAA GTACCAAAAG AATTAACACA 60

ATTACACGAA TAATTTAAAT AGAGAGTGTG ATAGTAGGTG GAATTATTAA ATAGTTATAA 120

TTTTGTTTTA TTCGTATTAA CTCAAATGAT ATTAATGTTT ACAATACCAG CTATAATTAG 180

40 TGGTATTAAG TACAGTAAAC TTGATTATTT TTTCATCATA GTAATTTCTGA CATTATCGTT 240

ATTTCTATTT AAAATGTTTG ATAGCGCGTC CTTAATCATA TTAAC TTCAT TTATTATTAT 300

AATGnATTTT GTCAAATCA AATGGnATTC nATTTTGTTG ATTATGGCTT CGCAGATTAT 360

45 CCATACTGGT GCCAACTACA TGGATATAGT TATATATGCA 400

(2) INFORMATION FOR SEQ ID NO: 2014:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2014:

5 TCTTTTCGAGG ACAGTAGAGG GTCCACCCTA TTGGACGTGG TACTGTACTA CTTTTTAAA 58

(2) INFORMATION FOR SEQ ID NO: 2015:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2015:

TCTACCTGCA GGCATTCAAG CTTGGCACTT GCCGTCTTTT TACAACGTCG TGA CT 55

(2) INFORMATION FOR SEQ ID NO: 2016:

20 (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2016:

30 TACTCTTAAG CTAACAACGG CGGTTATGAG TCCTTTGACA AGGTATCGGA GGAAAGACCG 60

TAAAGC 66

(2) INFORMATION FOR SEQ ID NO: 2017:

35 (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2017:

45 CCAATAAGCA CACTGCCATT ATTGAGGACG GTACATnTAC GGTTAGACCC AATTGTT CAT 60

GGCGGTGGGC ACATAGTGTT TGGCTTTGAG GAGGTTACCA TTGCC 105

(2) INFORMATION FOR SEQ ID NO: 2018:

50 (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2018:

CCTTCCAATA GTAATTGATT GATGTATGAG TATATTAGGT GTGAAATCAA GAGGATTC 58

(2) INFORMATION FOR SEQ ID NO: 2019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2019:

TTTCTCTCGTA GGTGGTTCTT CTTCATCTTC GTTGTTTTGT CCGAAGTTTG GA 52

(2) INFORMATION FOR SEQ ID NO: 2020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2020:

ATAGTTTAGG TGAGGATGTT GnGGTACGAC AGGAAGAAAG ACGGCAAACA 50

(2) INFORMATION FOR SEQ ID NO: 2021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2021:

TTGTCACAAT AATTTCTTCA GGATCATAGG AAAAATGATA ACGATTTTGT AAGTATTGAC 60

TAATTGCTTC GCGAGTTTCT AATAACCCCTT TATTGTGAGA GTATGATGTC TTGTCATTGT 120

TAATAGCATC AATATATGCC TTTTTCACAA CATCAGGCAT CGGGAAGTCT GGTGGCCAA 180

TAGTTAAATT AACACAATCA TCCAAATTAT TCATACGATT TGAAAATTGG CGATACTTGG 240

GTGGCTCCTA AAATAATTAG GAAATGAGGA nTtnAAGGAA GGTTCCTT TnGTGGACAC 300

(2) INFORMATION FOR SEQ ID NO: 2022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2022:

	TCATCCAAAT TATTCATACG ATTTGAAAAT TGGCGAATAC TTGGTGCTCT TAAATATTTA	60
10	GAATTAGAAT TTAAAGAAAG TTTTCATTTGT GACACCTCAA ATATAAATCA AATATTGTCT	120
	AAAAATTTAG AAATTAATAA TATCATAACA TACTTTTAAA GCAAAAAAGG GTAAATTACT	180
	TAAGCTTTAT TTGAAAAACG AAAAATGTCT AAATACACTG TAGTAACTAC TTTTCAAAAT	240
15	GAATAAAGTG GTTACAGTTA ATGTACTTAG ACAGTATAAA ATTATGAATC TTAAACTGT	300
	GATGGTCTTT GTAAATTAAT TATTGGATTT GTCCATTTAC AAACAAAGTT TGTAGATAAT	360
20	ACATATACGA TGATTACAGA TATACTTATT AAATAAAGAT	400

(2) INFORMATION FOR SEQ ID NO: 2023:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2023:

	TThAAATATA CCAATCACGT TCATCCACAG TGATCCTAGA CCAATCCAGA	50
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(2) INFORMATION FOR SEQ ID NO: 2024:

35

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2024:

45	TTTTTAATGG TTTAAAAATT CCCTAATAAA ATTTTGAAAA ACCTAAATTC CAAGGGGTTA	60
	AATTCC	66

(2) INFORMATION FOR SEQ ID NO: 2025:

50

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2025:

GTAAGAGCAA TGGCGCAAAA TGCCTGTAAT GATATTGTGA ACGTAATTGA ATCAGTAGAG 60  
5 GACC 64

(2) INFORMATION FOR SEQ ID NO: 2026:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2026:

CTGTCGCTGC GTGACTTAAT TCTTTTGCCC CGTTGGCATA TGAGGAAATG TCA 53

20 (2) INFORMATION FOR SEQ ID NO: 2027:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2027:

CATTTCACTA TTATTGGTTT AGGGTTGTTC ACGTTCATCA TGACCGCACC ACA 53

(2) INFORMATION FOR SEQ ID NO: 2028:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2028:

CAACTAGACA TAGTATTGCT GCATTAATCA AGTCAAGCTG CCACACTAAG AATCGATGCA 60  
45 AACGGAATCG TCA 73

(2) INFORMATION FOR SEQ ID NO: 2029:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2029:

AATAATAATT CTGGAATAGT GTTTAATACT TATTnTCCGT TTAAGATTTT CAACTTAATAT 60  
 5 GGTTTACAGC GCGTAGCTCG TCTAATTCAT CATCACGTGT AGAGTGCTCT GCCTTATCAG 120  
 ATCAGTT 127

(2) INFORMATION FOR SEQ ID NO: 2030:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 61 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2030:

20 GCAAGTGAAT TGAAGTGACA TGTGGCTGGT GCTTCATGGT AATGATAAAC CAACACCATG 60  
 G 61

(2) INFORMATION FOR SEQ ID NO: 2031:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2031:

35 ATAAATATCT ATTTAGATAT AAGTATTGAT AAGTTGCTTG AATTTATAAA GTGAAGGAGT 60  
 AGGTGTCATT AGTATAGT 78

(2) INFORMATION FOR SEQ ID NO: 2032:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2032:

GAATAGTGTT TATAAAATGT TGACACTGTA GTGGCATATT GTAAATTAAA TATTATTATG 60  
 50 TGATCATTTT GTTTAAATAT TAGTTATAAG AAGTGAAATA nTCATTTTAA AAGGAGACTT 120  
 AAAACTTGAA ACGATCAACG AATCAAGAAA AATTTCTTGA TACACTAATT AGACTTAATA 180

## (2) INFORMATION FOR SEQ ID NO: 2033:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2033:

TTTTGTCATC TGTATAGGTA TGC GCGCCGG TGTCTTTATT CACTTTGAAC TGTGCGT 57

## (2) INFORMATION FOR SEQ ID NO: 2034:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2034:

AAGGCATTGG ATATAAGACT TGATGTTGCA TGGCAATCAC ACTGCCTAAT CCTTGCATAT 60

AA 62

## (2) INFORMATION FOR SEQ ID NO: 2035:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2035:

ATGGCAAATA CTATACATCG TCCAATTGAT TGAAAAATAT GGTATTATAA GA 52

## (2) INFORMATION FOR SEQ ID NO: 2036:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 86 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2036:

AAGGTGTTTT TATATGCTTA TTACAAATAC TTAACGCGAT GAGTTTCTCA ACCAAATTGA 60

## (2) INFORMATION FOR SEQ ID NO: 2037:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2037:

TACCCACCCC CAAACCCAAG GTTTTAAAAA ACCCCTTCCA AAAGCCCGGA AAAACCAAAA 60  
 GGAATTATTT T 71

## (2) INFORMATION FOR SEQ ID NO: 2038:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2038:

GAATCCCGGA AGTACAATTT GGTACGTGAA GAAAATGGTA GTGGAATTAC 50

## (2) INFORMATION FOR SEQ ID NO: 2039:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2039:

CAGTATCTCT TGGTATTTTA ATTGGTGCTT TATTAAACGT AATTTTACCT TTATATATCG 60  
 ATGGAGCGAA GAGTATTTTC GTATACGTTT ATAGTCCGTC TATTTTACCA GGTATGATTC 120  
 CTTGGTTTAT GATTTTATTC AGTCATTTAC GTTTTAGAAA ATTACACCCT GAAGAATTGG 180  
 AAGGTCACCC ATTCAAAATG CCTGGTGGCG CAGTAACTAA CTATTTAACA ATCTTATTCT 240  
 TAATATTAGT ATTGGTTGGT ATGGTATTTA ATGTTGAAAC TAGAATATCA GTGCTTATTG 300  
 GTGTCATCTT CTTAACGATT GTAACGATTT ATTATTTTAT TAGATATAAT AAAAnTAATG 360  
 TAAAGCAnAA TAGTATGTTA TAAnGAGCGn TACTTATGAC 400

## (2) INFORMATION FOR SEQ ID NO: 2040:

- (A) LENGTH: 79 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2040:

10 AAGCTGATTT TTCTAAATGT TGAAAATCAT AAAGTGCTTA ATAATAAATA ACGAGATCTA 60  
 AGTAATAGTG CTCCATTAA 79

(2) INFORMATION FOR SEQ ID NO: 2041:

15

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 54 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2041:

25 AATTGAACGG ATCGTTCCCA ACCGTTATCA ACCCAGACCG GTGTTTGAAC CCAA 54

(2) INFORMATION FOR SEQ ID NO: 2042:

30

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 50 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2042:

AATGGGATTG GTTCAAAGTG AAATGGGCTG TTAGTCCCTG TAAAACCAAG 50

(2) INFORMATION FOR SEQ ID NO: 2043:

40

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 109 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2043:

50 ATTGGnATAA TCAAAGCATT GAATCATACA TAGTCACATT GATTGTTTCC TCAGAGTTTC 60  
 AACACTCTAT AACTCATTTT AGTAATTTGC TGATTGCGCA CTTCATGTG 109

(2) INFORMATION FOR SEQ ID NO: 2044:

55

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2044:

10 TTTTATGGAG GTGATGAAGT GGGTGAAGCT GAAAGGAAGC AAAAGCTTGG 50

(2) INFORMATION FOR SEQ ID NO: 2045:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 101 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2045:

TTGGCCCCCT TCCAACCCTT GGAAATTTTA AAAGGCCaT TTTGGGGTAA AACCCCTTGGT 60

25

TCCAAGGACC CCCAAAAGTT TTTTAACCTT CCAATTATTA T 101

(2) INFORMATION FOR SEQ ID NO: 2046:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 100 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2046:

ACCCTTTCCA AAAAGCCCAT TTTGAATTCC CCAAAGGGAG CCAAATTTAA GATGGCCGCn 60

40

AAAAAGGACC GGGGGGTCCA TGTTTAAATT TAAGCCGGAC 100

(2) INFORMATION FOR SEQ ID NO: 2047:

(i) SEQUENCE CHARACTERISTICS:

45

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2047:

GTTAGTTATG AGCAACGTAT TAATGAAATT ATTGAGCAGT AATTnACCAG 50

(2) INFORMATION FOR SEQ ID NO: 2048:

55



- (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2048:

10 TACGTATTTT CAAATGACGT TGGTGGACGT CACACTCCAT TCTTCTCAAA CTATCG 56

(2) INFORMATION FOR SEQ ID NO: 2049:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2049:

TTTTCCCCC CCCCCCAAA TTGGGGGTTA AAATTTTAAA AAAAGGGGTT AAAGGGAAAC 60

25 CCCAATTCCG GTTAACCTTT TG 82

(2) INFORMATION FOR SEQ ID NO: 2050:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2050:

TCAGATGGAT GGCAGTTATT TGGTATTCCA TGGGTATAAA GATAGCATAT T 51

(2) INFORMATION FOR SEQ ID NO: 2051:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2051:

50 TGAACGGGAG AAAGATGTTG TTGCATGGTG TCTCGGAAAC GTTTGTGTCC ACGTA 55

(2) INFORMATION FOR SEQ ID NO: 2052:

(i) SEQUENCE CHARACTERISTICS:

55

- (A) LENGTH: 74 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2052:

ATACCTGGAT GCAAAGGCAA AGTCGCAATT TTCCCTGTTC TAATGTGTCT AACTTCTCTT 60

CTAAAGTTCA GGTT 74

(2) INFORMATION FOR SEQ ID NO: 2053:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2053:

AATCTTGTCT GATGTAATGT TCAGGTCCCT TGACCCTCAT ATGCATGAGG T 51

25

(2) INFORMATION FOR SEQ ID NO: 2054:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2054:

35

CATCGACTTA TAGCTTAATT ATTATAAAAA ATTTCTCCAG ATTAACTTT CT 52

(2) INFORMATION FOR SEQ ID NO: 2055:

(i) SEQUENCE CHARACTERISTICS:

40

(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2055:

ACTGACACAT TATATTAGTG AATTATTAAA AAATGATGAG AAAATTAAAA TCATCATGAA 60

50

TGAATTCGGT ACTTTTGATA TTGATAGCAA TAGTATTTCA AATGAAATTG AAGTCCATTC 120

ATTGATTAAT GGTGTGTGTTT GTTGCGATCT TAAACAAGAA CTTGTCTATG AACTAAAAGC 180

CATTGCTTTA AAAGGGGACG TTAATCATGT CATCATAGAA GCGACAGGCA TTGCGCATCC 240

55

TTATTTATGG TGTATTAGAT GCGACTCGAT TTTTAGAACG TCATCAATAT ACCGAAAAAT 360  
 ACAGTTTCGC TGGATGGGGA GGATCCAGTT GGAAACTAAn 400

(2) INFORMATION FOR SEQ ID NO: 2056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2056:

TCAAAACTTT GAAGTTGTGC TTGCTTTGCA CCATTTTAA AATGTTTCAGC TGAGAGTATA 60  
 TCTTCCGCTG TAAATTTTAC TTCTCCTGGA CTTAAAGATT CAATTAACAA CCAAGCCGAT 120  
 AACGTATCAT TTAGCAATTG ACTCATGAAA TCCCACCTTG TTCCCTATTT GTTTTTTACT 180  
 TAATGCTATT TTAACAAATA ATTAAATCAT ATTAGTGTTT TTTCAAAAAT ATTCATATAT 240  
 TATCATTACC ATATTTATTC AACAAATGTT TGTAATATCC TCACTAATAA AATTAATCGA 300  
 TATGACCATA ATTCATTATC CAATAAATGA CTATAAAAAT TTCTnCTATG CCTTCATTG 360  
 CAACTAAATT TGGACATCAA AAAAGAGCAC TCCTGAATGA 400

(2) INFORMATION FOR SEQ ID NO: 2057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2057:

TTGTTGTTGT GATTTTACAT TTTCAAAATT TTGTTGCATG TTGTTAACTT CATAAATTAG 60  
 TGATTGCGACT ACATCATTCA TGAGGACGCC TCCTACATTT TTTAATTTAT CACAATATAC 120  
 TGTATTCGTC ATGTTTTAAC ACTCTATATA ATTTGATTTA ACTATTTTTT CAAATGTGTT 180  
 ATCTGTAAAT TCAAGTAAAT CTAAAACTT CCTATATAAA TACAAAATTT TATCGTGTAT 240  
 GTTGTTATAC GATGAAAATA CTTTTAATCT AATAAAATCA TTTAAATCAA ATACACCTCT 300  
 GCTGATTAAC AACACATACT TGTACTTGCC TCAAAAATAA AAATTACTAA TCATGATTG 360  
 ACTTTTATAA CAAATTTCAA AAATATTGTA ATGAGTATTC 400

(2) INFORMATION FOR SEQ ID NO: 2058:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2058:

10 TCTTTTACT CGCAATTTTA GGAAAAATGG TTGGATCAAT TGATAAAACC GGAAAAATTAT 60  
 TAACAATAAT CAATAAAATA TCAAGCATAA TAATTATTAT TGTGCTCTG ATGATATTAC 120  
 AAAAAGTTAT TCAATTATTA TTCTAAAGCG TTATGTAGTT GTATTTTAAA AGCGTTATAC 180  
 15 AAAAGACATA CTTGTGTCTA TGTATAACGC TTTATTTATT ATAAATTTGG ATCAATTAAC 240  
 TCAACAAATT TAAATGTTCC ATTGTCATAT TCAAATTTCA GGATATTACA ATTACCGATA 300  
 TTATGCTTTA ATGCTTCATC TAGTTTAAGG CAATATCTTA AAAATACCnC CCTTAnTGGT 360  
 20 CCATGACTCA CGACTAATGC ATTATTCTTT GGTGAGAC 400

(2) INFORMATION FOR SEQ ID NO: 2059:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2059:

AAAACAACAC AATCAAAAAT ATTGGATACA ACTGAAAAGT TATCAAAGCT A 51

35

(2) INFORMATION FOR SEQ ID NO: 2060:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2060:

TTATCATGTT TAGTAGATTT TAAGAAGCTA GAACATTGTA GATATGATGA 50

(2) INFORMATION FOR SEQ ID NO: 2061:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2061:

5 AACGTCGTnA TATCAnCTTG CCAAACAAAG ATATTGTCAC CTTTTATCGG 50

(2) INFORMATION FOR SEQ ID NO: 2062:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2062:

ACCATGGTGn ATATGGTCAT GATGATCGTT TGTGCCGGGA GCTTGAGCTG 50

(2) INFORMATION FOR SEQ ID NO: 2063:

20 (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 81 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2063:

30 TTTCCTTGG TTTTGAATT TAACCAAATT TGGGAGGGAT TTGGGACCAC CCCCAGGATT 60

TTAAAAAAAA AAAATCCCAG G 81

(2) INFORMATION FOR SEQ ID NO: 2064:

35 (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2064:

45 TTTTGGGGAC CTTAACTGGG TGGGTCTGGA ACTGTTTCCC TTTCAAACAC A 51

(2) INFORMATION FOR SEQ ID NO: 2065:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear
- 55

ATGATGTATT CAAAAGGTAT CTATAAAATA GCTTTAGTTG GAAAAGATGA GA

52

(2) INFORMATION FOR SEQ ID NO: 2066:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2066:

TTTCATCACT GGCATCTTGT AATTCTTGG TCTCATATCT GGAATTAATA GGT

53

(2) INFORMATION FOR SEQ ID NO: 2067:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 63 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2067:

AACCATTAAG AAATTGGATA CACAGAGCAA ATATGGTTAT GATTAGGAAC CATGGCATT

60

ACC

63

(2) INFORMATION FOR SEQ ID NO: 2068:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2068:

AAAGGCAGCG ATGTTACTCA TACCGAACCT GGTATATAT GAGCGATGAT GCAATGTA

58

(2) INFORMATION FOR SEQ ID NO: 2069:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2069:

AACAGGA

67

## (2) INFORMATION FOR SEQ ID NO: 2070:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 86 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2070:

CATTTAACCC ATCTTCTTTT TTTAATTCTT CTATACTACG GTTTAAAAAC TCTACAATAA 60

CTGCCATTTT ATCATCATCA AAGACT 86

## (2) INFORMATION FOR SEQ ID NO: 2071:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2071:

GTTTCTTCAA AATATGTGTA TTACCTTTTT GTATGGTTAA ATCTTTTAAT TCTATCATTC 60

TTGTCTTACC TCTTTTGGTG TATCCTCTTT TTCAACATAT GTGATCGATA TGACATATTG 120

CCCTTTATGC TTTATTTTGA CATACGTTCT ACTAGGTGAA AATCCATTAA ATGTTAATTT 180

ATAATCAAGC TTTTCCCCTC TTTCATAATA AGCCGTAATA TTAACATATT GTTGCGTACC 240

TTTTGGCACT TTGGCATAAC TATACTCCGT TTTTAAGAAA GGATTAAAAAC GATCAAGTAT 300

AGGATGATGT ATGANTGTAA AAGCAATAGT AATGGATAAT ATTAATCCTA ATAATATTGC 360

AATGATAAAT TTCATAGTTA A 381

## (2) INFORMATION FOR SEQ ID NO: 2072:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 52 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2072:

ATCCCCGAAT TGCTTCGCAA ATGTATCATC TTCGAGGCTA CGTTACTTAA AT 52

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2073:

CCAAAAACAG CATCACTGTG ATTATGGTTT TCATCTTCTA TAACTAAGAA TACATGTTTT 60  
TTTGTAAGAAA TTTTGTGAT CA 82

- (2) INFORMATION FOR SEQ ID NO: 2074:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2074:

TTTATCGCAA TGAGGGAAGA TAAAGGATCC CGAAGCGCC GTATGGGTTG GCAAACATTG 60  
GGGACCAAGA CCGTTCCCCA TA 82

- (2) INFORMATION FOR SEQ ID NO: 2075:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2075:

CTTGGTTGCT CTTTATTTAT TTAATTGAGA CCTAGAAATA AGTTATTAAG CACAATCATT 60  
CACTTT 66

- (2) INFORMATION FOR SEQ ID NO: 2076:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2076:



## (2) INFORMATION FOR SEQ ID NO: 2077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2077:

TACGTTCTAT CATAGAGCCT GGAGATGAAA TTATAATACC GGGACCAATT TATGCAGGCT 60  
 ACATACCACT CATCGAAGTA CTAGGTGGTA AACCAATTTA TATTGATACA ACAGCAACAC 120  
 AATTTAaAAT TACACCTGAT GCATTAGAAA GTCATATTTT TCCAAAGACA AGAGCTGTCT 180  
 TGTAAATTA TCCGACTAAT CCAACTGGCG TAGTTTTAAA AAGAAAtGAA GTTyTArATA 240  
 TCGTAAATGT ATTAAAAAAA TATCCGTTAT TTATTATTAG CGATGAGATT TATGCTGAAA 300  
 ATACATTTAG TGGTAAACAT GTATCC 326

## (2) INFORMATION FOR SEQ ID NO: 2078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2078:

ACCCCTTAAT TTAATTGATG TTTTGTTATT TTAAAATGA ATAGTTGAAG AAAAAT 56

## (2) INFORMATION FOR SEQ ID NO: 2079:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2079:

CACGTACTGC CATGTATGCA CAAGCCGGCA TTCATAAAGC CTTCCATGGC AGTCGTTATC 60  
 A 61

## (2) INFORMATION FOR SEQ ID NO: 2080:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 94 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2080:

TGGGACAGGG CGTACCATT CAAAATGATA GTTCTGAGCT GCTAATTAAT ATGCCTTCGA 60

10 AAAAGATGAG TTAAATTGA GATGATGAGA CTGA 94

(2) INFORMATION FOR SEQ ID NO: 2081:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2081:

AAGACGACAT GCAAGACATT GCCTTATCTA ATGACAATGT TAAAGCGAGT 50

25 (2) INFORMATION FOR SEQ ID NO: 2082:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2082:

35 TTGTTTCGGCT AAAAATAAAG TGGCATTGAC GTGACCGCAA GTTGACGTAC 50

(2) INFORMATION FOR SEQ ID NO: 2083:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 133 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2083:

CTTCCCAACA TTGCGCACTG AATGGCGATG GCGCTGATGC GTATTTCTCC TACGCTCTnG 60

50 CGTATTCAAC CGCTATGGGC ATCTCATACA TCTGTGATG CGCTATTAAG CAGCCCGAAC 120

CGCACACCGT GAG 133

(2) INFORMATION FOR SEQ ID NO: 2084:

55

(A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2084:

10 GGTAGGGGCA CTATTTTGTA TG TAGAGGTT TTGTCGGGCA GTGTGAAATC AACGACT 57

(2) INFORMATION FOR SEQ ID NO: 2085:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2085:

CCCCCCCCAA AAACCGCCCC CCCCAATTG GCCTTTTTC AAGGGGGGTG TTTTAA 56

(2) INFORMATION FOR SEQ ID NO: 2086:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2086:

35 AATAGCGAGA GCCCGACCAT CGCCTCCAGA TTGCGACTGA ATGGCAATGC GCTGATGCGT 60

ATTTCTCCTA CCATCGTGGT ATTCAACGAT ATGGGCACTC TCATACAATn GCTC 114

(2) INFORMATION FOR SEQ ID NO: 2087:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 80 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2087:

50 AAGGGGGAAA AGGAACCCAA GGCCCCCTTC CCAAGGAAAT TGGGGGGTTG GAAAAACCA 60

AAAATTTTTT AAAAACCCGG 80

(2) INFORMATION FOR SEQ ID NO: 2088:

55

- (A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2088:

10 GGGGTAAGTG GTTGAGACAG GAACTTTACA AGAGGTGTTT CGTCATCCTA GAACGACGCT 60  
TGCTCA 66

(2) INFORMATION FOR SEQ ID NO: 2089:

15

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2089:

25 ATCAATGTAT TACGTATCGA AGGTGAATTA TATCATACTG CTAAATATGA CGGTTTCACA 60  
TC 62

(2) INFORMATION FOR SEQ ID NO: 2090:

30

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2090:

40 GAATTCGCTA TCCTGAAATC CTGAGTCGCT GTCCTGAAAT CTGAAATCGC 50

(2) INFORMATION FOR SEQ ID NO: 2091:

45

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2091:

CGGGGTTCCT CCGTTCAATT CCCTTTGAGT TTTCAACCTT GCGGGTCGTA ATTCCCCAGG 60  
CCGGAATTGC TTAA 74

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2092:

ATTGTTGGGT ACGGTGGTGG GTTAATAATC CAAACACGTT AAACACCCG TTTTAGATAT 60  
 ACCTATACAA 70

(2) INFORMATION FOR SEQ ID NO: 2093:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 88 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2093:

GTTTTGGGTC TTGGGTATTA GTTTAATCTC CATCATGGTT AATTGGTATG GTATTGGTAT 60  
 TAGTAATCAT GTATGATGGG CTGGGCGG 88

(2) INFORMATION FOR SEQ ID NO: 2094:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2094:

TGGCCATTGA GCGCATTAC GTACTACGGC TTGTCGTAGG GACAATTATT AT 52

(2) INFORMATION FOR SEQ ID NO: 2095:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 85 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2095:

AGTTGATGCA ATGAGTGATG CAAGGCGACT GAAAAGTTGG TATGAATGAC AAAACTTTAA 60

## (2) INFORMATION FOR SEQ ID NO: 2096:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2096:

ACTTAAAATC TAATACGGTA TTTTCAAAAA CGAATAAAAG TTACCTCTTG TCT

53

## (2) INFORMATION FOR SEQ ID NO: 2097:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2097:

AACTTAATAT TGCTACGATA TGAACGGCAT nAACATACTT AGCGnTGnTC

50

## (2) INFORMATION FOR SEQ ID NO: 2098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2098:

CAAAATAAGA AATTAATTAA GAAAATGCCA AGATGCCAGA TGCCATCGGC GGAAAGGAAA

60

TTGCACGTAC GG

72

## (2) INFORMATION FOR SEQ ID NO: 2099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2099:

CCACCCAAAC CCAAAAAATA AAGCCCAAAA AATTGCCAAG GAAGGAAAAG GAAAATTGTT

60

## (2) INFORMATION FOR SEQ ID NO: 2100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2100:

CACCAATTTTCTGGnGCT GGATCTCGAC CTAAGTCCTG TAATAATTGA CGTTGAACAC 60  
GAATTAATTT ATTAATTGTT TCTACCATAT GCACAGGGAT ACGAATCGTA CGTGCTTGGT 120  
CAGCAATTGC ACGAGTGATT GCTTGTCTAA TCCACCATGT TGCATATGTT GAAAACCTTAA 180  
ATCCTTTGTT AAAGTCAAAT TTTTCAAC 208

## (2) INFORMATION FOR SEQ ID NO: 2101:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2101:

TAATGAAATT AAGTAAAATA AAAATTATTT CATGGATTGC TTCTATCTAT ATCGAAATAT 60  
TAAGAGGAAC ACCAATGTTA GTTCAAGTAT TTATCGTATT CTTTGGTATA ACTGCTGCAT 120  
TAGGACTAGA CATTTTCAGCT CTTGTTTGTG GAACAATTGC ATTAGTTATT AATTCCTCAG 180  
CTTACATTGC TGAAATTATT CGTGCAGGTA TAAATGCTGT TGATAAAGGC CAAATGGAAG 240  
CCGCACGTAG TCTAGGTTTG AATTATAGAC AAACGATGAA AAGTGTAATT ATGCCACAAG 300  
CAATTAAAAA TATTTTACCA GCTTTAGGTA ATGAATTTGT CACTTTAATT AAAGAATCAT 360  
CTATTGTGTC AACAAATTGGA GTTGGCGAAA TTATGTTTAA 400

## (2) INFORMATION FOR SEQ ID NO: 2102:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2102:

## (2) INFORMATION FOR SEQ ID NO: 2103:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2103:

TTTAAGGAGA AAGGTCATTG GTATAATCTT GAGAAAGAGT GGCAAGAGTT CTTAAACTCT 60  
 GGGAAAGAGG TGAAAAATAT TAAAAATGGA GTAAAAATATA GCGGTAATAG TCAAAGACCG 120  
 ACTATATTTA AAGTTGAATA TGAAATTAAT GGTGAAAGAA ATATTAGAAG AATATTAAAT 180  
 AAGTAGAGGT GCCAACATGA CATTTGAAGA GAAGCTTAGC AAAATATACA ATGAAATTGC 240  
 GAATGAGATT AGCAGTATGA TACCGGTAGA GTGGGAAAAA GTATATACAA TGGCTTATAT 300  
 AGATGATGGA GGAGGTGAAG TATTCTnTAA TTATACTAAA CCAGGnAGTG ATGACTTGAA 360  
 TTATTACACC AATATACCTA AGGGTATAAC ATTCCGGTGC 400

## (2) INFORMATION FOR SEQ ID NO: 2104:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2104:

AACCATCATA AAATGTTATT AAACCGTCAT GGACCGCGTC ACCATTTAGT CCT 53

## (2) INFORMATION FOR SEQ ID NO: 2105:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2105:

AAGCACAAAT TAGCAGAGTG TTTTAATTTA AATGAACAAG TACCTTTACA ATTTTTGGAT 60  
 AATGTAAAAG TTGGTAAAAA TAATATTTAT GnTGCTTTGG AAGAGTTTGC CAACAA 116

## (2) INFORMATION FOR SEQ ID NO: 2106:



- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2106:

10 AATTTGCAAA AGAATCATGG ACAATTGAAA GCAAAAAGGA TCATCATTAA AATTGAACTG 60

C 61

(2) INFORMATION FOR SEQ ID NO: 2107:

15

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2107:

25 GAACCAATGT TAAGCTAATT AATGGAATCC TAACAGCGTT AATCTATTTA AAAA ACTTAA 60

(2) INFORMATION FOR SEQ ID NO: 2108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2108:

ATTTGANAAT GAATCTGTGG AACATTTTGC TAATCATGAG GATAAAATCA TATGATGTTG 60

40 AAAGCGAGAA TGGGATTACG TTAAACGTGG GCGCTGCTAA TTAAAGCACC TTATTTAGTG 120

GAAGAT 126

(2) INFORMATION FOR SEQ ID NO: 2109:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2109:

55 ATAATGTTAA AAAAACGGCA ACTAATCTTT TCATACTAAC AATGATTATA TGTACAATAA 60

CGTTAATAAT GCTAGATAAT TTTAAAAAAA TGAAAAACCG TGAATATCAA AAAGAAATAG 180  
 5 CAGAAAAAAA TAGACATATT AATACATTAA TTGCTGAACA AGAGCGACAT AGAATTGGTC 240  
 AAGACTTACA TGATACGTTA GGGCATGTGT TTGCAAGTTT ATCATTAAAA TCAGAATTAG 300  
 CTTATAAACT AATAGATGCT GATGTAGAnA AAGTAAAAGC TGAATTATTA GCAATTAATA 360  
 10 AATTATCTCG TGAATCATTG nACAAAAGTC GAGAAATTAn 400

## (2) INFORMATION FOR SEQ ID NO: 2110:

## (i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 61 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2110:

20 AAGATTTAAT ATCGGGGGTA ATGTTGATTT TCAAATATCG CGATGTGCTT GTACCACCAT 60  
 25 T 61

## (2) INFORMATION FOR SEQ ID NO: 2111:

## (i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2111:

35 TATACTAAAT TATGGCAACT TGGCTCATAT AGGTCGAGTT ACCAGACATA TTCGG 55

## (2) INFORMATION FOR SEQ ID NO: 2112:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2112:

50 CGAATAAGTT CTGGGCCTTT TGTTGTTTAT TAGCTTGTTT CTGTTTTGAT TGTTCTGCCA 60  
 TTTGAACTAC ACCAACCTTT TAAATTTATT CTAGTGACAG GATAACTAAA ATATATTTCT 120  
 55 TATGCAATAA TTTCCTATTG ATAAGCATTT TCAGATTTTA GTTGTAATTT TTGCCCTAAT 180

AATTTATAAA GAATAAATTC GTCTCCTCTT TGACCTATAA TATATTGAnC ATTATAAGCC 300  
 ATGCGATTCA TTCCAGACAC AGCCATAAAC TCTTGTTTAT CTATCATTTT AAATACCATT 360  
 5 TTTAATTTGG CTTAATGGGA CATTCCGTAT TAAATCATTT 400

(2) INFORMATION FOR SEQ ID NO: 2113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2113:

TGTTTTCAAA GCATGGTATA AATGCTTTGT AACATAGGTT TTGCCTACAT CAGTATTCGT 60  
 20 ACTTGTAATA AAAATCCTCA TAAAAAT 87

(2) INFORMATION FOR SEQ ID NO: 2114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2114:

TTTACAAGTT AAATATAnCA CTAAAAATTT TTAAGTCAAT AAGAATATAT 50

(2) INFORMATION FOR SEQ ID NO: 2115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2115:

TGTGCATAAA ATCCTTTTAC TTTTGTGAAT TGATTGTTAT CTTTAACAAT TA 52

(2) INFORMATION FOR SEQ ID NO: 2116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2116:

ATTTA<sub>n</sub>AACC CAATTCCCCA TTATTTTTTA AAACGGATTC CATGGGTGGA CCATTGGAAA 60  
 5 TTTTAAAAAA ACCATGGCCC CATTCCAAAA AGTTAGGATG GCCAAAAAGC CTT 113

(2) INFORMATION FOR SEQ ID NO: 2117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 93 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2117:

GATTTATCAA CTATTTCCGT ATTTTGATTA TCTCCATACA ATTTCCAATC CTCTGGCTTA 60  
 20 TCAATAAATA ATGATAATGG CTTATCTTTC GAT 93

(2) INFORMATION FOR SEQ ID NO: 2118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2118:

TGATTACCTT GA<sub>n</sub>ACATGAC TTT<sub>n</sub>CCTGA<sub>n</sub> TGGTAAATAT TTACAGTTGT 50

(2) INFORMATION FOR SEQ ID NO: 2119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2119:

AGATATAAAA TATAAAAAAT TATTAAAAGC TATATCCAAT CAAGACTTTA AAGGGTTAGT 60  
 TCCAAATATC AATCAGAATG ATAATTAT<sub>n</sub>C TGAAATATAT ATAATTAACA ATACTAAAAA 120  
 50 CTTAATATAT CATTTATATG ATGATAGAGG TCTATGGCTA GCTTTTAATA ATAATGAAGA 180  
 TTATGCAAGA TAT<sub>n</sub>CTGAAA AATATAATGA TTTAATA 217

(2) INFORMATION FOR SEQ ID NO: 2120:

(A) LENGTH: 75 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2120:

10 AGACTTAGTA AAGTTAGATC ATCTAAAGAT GAGCGTAAAA TTTATATTTA TTTAAATAAT 60  
 GGATGATATA TCTAA 75

(2) INFORMATION FOR SEQ ID NO: 2121:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2121:

25 CACCACCTAC ATTTACTATA TAAAATGTAG GAATGGTAGA TTGATTTAGA TAAACTGGAC 60  
 GTATCACTTT AAGTGCTTTT TCAAAGA 87

(2) INFORMATION FOR SEQ ID NO: 2122:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2122:

40 TGTTCTTTAG CTAAAGCTTT AGCTTCTTCA TCACTTTTAA CTTCATAAAA ATCTACACCA 60  
 GTAGCTTCTT 70

(2) INFORMATION FOR SEQ ID NO: 2123:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2123:

55 TANATCTAAA AGGAGAAATG CTGAAGATGA GAGAGGTATT TTTGAAATGT 50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2124:

TTAAAGGGTA ATTGTTTTAA AAAAGATTA AACCGAGGAC TTTTAATTGT TAAAACCATC 60  
 CCT 63

(2) INFORMATION FOR SEQ ID NO: 2125:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2125:

TGTAAACGAC TATTACATGA TCACAATCCA TTCAGCGCCA TTATATAAAG GTACTTAATA 60  
 TAGGACATCA TTCGCAGC 78

(2) INFORMATION FOR SEQ ID NO: 2126:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2126:

TTTGGTCGTG TGCAAGACAG AAGTCGACAT ACTCCAATGA AACATCATGT 50

(2) INFORMATION FOR SEQ ID NO: 2127:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2127:

TTTGTGTCGA TCGCCTTTTT CACTTCTTCT GAATGCTCGA AATCATTCGT 50

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2128:

TGTCTGAAAT GATCATTAGG ATTGCTCCAG CTCAATGTCA GTnGnAATGA

(2) INFORMATION FOR SEQ ID NO: 2129:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2129:

TTCAATTACC TACAAAGTGA GTGCTTTCTT GACCAAGTCA AAACGAACTT TTATATTTGT

CCAAC

(2) INFORMATION FOR SEQ ID NO: 2130:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2130:

TTCCAAGGTG TCGCTGACTT TCAACACACT GAATATATAC CTGCCAGTCG GCTGGTCATG

C

(2) INFORMATION FOR SEQ ID NO: 2131:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 92 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2131:

AGTTCTTCAG TCCAAATGCG GCATGTTGAC CCACCATAGG CGAGGGCATT TTCACCACGG

## (2) INFORMATION FOR SEQ ID NO: 2132:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2132:

CCCCTCGAGT TTTTTTTTTT TTTTTTTTCTA CTGGAGCAAA ATGAATTTTT TTTATTGTAC 60  
TTCAGGGCAA CAAGTCAACA GCTGCAGGAA AACAAAACCA GGTCCAATCT ATGATCTAAG 120  
AGGAAGTCAG GAAAGGCTTG GAAGAGAGAT CCAAAGGCCA TCCTGGCAAG GGAATCCCA 180  
CATGAGAATT CCTGGGAGAG AGCAGGCCCC AGGCAGCAAG GTCATCTTGC CTGCTTCTCT 240  
GTAAGTTAAT CCTTCACAGG GAGCCAAGGC TTCTCTTGAC TGCTTGACA AGAGGGTAAG 300  
GGCCCTGGTT GCAGGATTTG CCAAGTGAAGT CATCCATGTC AATAGACCAG ATCATGGCTC 360  
CTCCCAGGTT AAATTCCTTA AGAACTGAAC CTTGnCTCCA 400

## (2) INFORMATION FOR SEQ ID NO: 2133:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2133:

TTCATCATAC AACATTACAC TTTGTATGAC TAAACCCAAA TTAACGATAT 50

## (2) INFORMATION FOR SEQ ID NO: 2134:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2134:

GTGGCAAGCT TTTTAAAGGT CTGACTGCCA TCGACGGATC TATGTTAACA GGTGGATCT 59

## (2) INFORMATION FOR SEQ ID NO: 2135:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2135:

ATCAAAGTCA TCTnCATGGT CnATCACACC ACGCTTTATA TGGTAATTCT

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(2) INFORMATION FOR SEQ ID NO: 2136:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2136:

20

CGGGATCTGA GGTGCTATC TGCAATCTGC AATCGCTATC TGCAATCTGG AG

52

(2) INFORMATION FOR SEQ ID NO: 2137:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2137:

nCTCAACCAC CCACACAACA ACACAACAAG CAGCACCCAC ACACCACACA

50

35

(2) INFORMATION FOR SEQ ID NO: 2138:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 87 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2138:

45

TGTATTGTCA TTGTAGACGT GTGTAGCCAA ATCATAAGGG CATGTGATTT ACGCATCCAC

60

CTTCTCGGTT TGTACCGCAG TACTTAG

87

50

(2) INFORMATION FOR SEQ ID NO: 2139:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2139:

5 TTCACCGTTG CGCAACGTTT AAGTTTGAAG TTCGTTTGGC ATGTTGAAAT AAGCACCAGT 60  
TACACCAAAA CGCCCAG 77

(2) INFORMATION FOR SEQ ID NO: 2140:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2140:

20 ATCTTCTAAC ATTCACTTAG TAGCGTnATT TTTCGCTTAT AATGAAATGT TAAGCATATG 60  
CGGGATTTAT ATTTTAAAGA GACCTTTAGA TACCATATAT ACCTAGGTTA TTGAAAATAT 120  
GGATACCTTA TATAAGTGAT TTGCAATA 148

25 (2) INFORMATION FOR SEQ ID NO: 2141:

30 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2141:

35 GCTGGCACAT AGATGATCGT CAAGTCGATC TCGCCAGTCT GAAGTCAAGA 50

(2) INFORMATION FOR SEQ ID NO: 2142:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2142:

50 TTGTTGTAAA TACTATCACT GTACATGGGT GCTATCAAAA TATTGTCAGT TCGTAAAATA 60

(2) INFORMATION FOR SEQ ID NO: 2143:

55 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 135 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2143:

GTAGTATATC TTATTAAATTG TATCATGAAG CAATTTAAAT ATCATGACAA TTTAGTTTGA 60  
10 AAAACACACT TTGTGTTGAC GTTGTGTTTT ATGGGATATA GnATAGTAAG GAATGTAAAA 120  
TGAAGGAGTG AATGC 135

(2) INFORMATION FOR SEQ ID NO: 2144:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2144:

25 TTTTAAGGTT TGAAGAAAAA AAGTTTTAAA AATTCAAGGA AACATTAAAT TAATTTA 57

(2) INFORMATION FOR SEQ ID NO: 2145:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2145:

TTTCGAAAGT TTGATAGTCC ACCTTACATT CTCCTACTAT TTTCTGATGT CCCAATACTT 60  
TATATTATTT AAAGTAATAT AAAAGCAATC TCTTTTGAAG ACATGTTAAC CTAAATATTT 120  
40 TTATATATAA TATATATATA AAATATAn 148

(2) INFORMATION FOR SEQ ID NO: 2146:

45

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2146:

GTTAATACAA TACGGTTAAC AGCACCTTTA CGnTAGTTGC TTTnCTGCAn 50

55

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2147:

AATCCCCTCT TTTCTCTATT TCCTAAATCA TAGAACTTTT AACAGTAAAA TTCAATCATT 60  
AATACATG 68

(2) INFORMATION FOR SEQ ID NO: 2148:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 92 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2148:

AGGTCCATTT GTAATTTATA ATGTTGACTA ATAACATCTA CAGAATTTAA CGTTCCCAT 60  
CCTCGCCACT GATTGTAAAT AAACAAACCA TA 92

(2) INFORMATION FOR SEQ ID NO: 2149:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2149:

ACCATCCATT AAATCAGGAT CTTCACTAAT AAGTGCTAAA TTAGCAGCGC CACGTTTAAC 60  
GTAATCCAT 69

(2) INFORMATION FOR SEQ ID NO: 2150:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 384 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2150:

TCAAAATATA TACGATCACC TTTCTGTAAA ATCACACTAT TTTTATTTGC CGCTTCTGGA 120  
 TGTGTGTTTAA AAAATTGTTG GCCAACTTCA CCTTTTAACG TGGCAAATTG ATAATTTCTT 180  
 5 GGTAGGTCAT GTTGAATTAA CCAAATGACA TAGTTATAAC AATATATACA GTTCCATCA 240  
 TAATATACGA TTGGCATAAT TTATTCGCTC CTTTAATAGT ACTTATAGTC ATTTTTCCTA 300  
 10 ATTTAAAAAC ATTTAAACAA GGTTGTCAC T GATAAGTCC TCGCGACACG AAATTGCCAT 360  
 AAAATTTATT TTTCAGnTTn ATAT 384

## (2) INFORMATION FOR SEQ ID NO: 2151:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 83 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2151:

TGTTGTTTAT CACTATATTT TAAAAATAGT CTATAAGGCT TATCAGATGA AGTAGCTGCT 60  
 25 GCGGTAACAC CACCAGTAAA TGT 83

## (2) INFORMATION FOR SEQ ID NO: 2152:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2152:

GTATTCGTAC ATTTTTCAGC AATTAACCAA GATGGTTACA AATCATTAGA AGAAGGTCAA 60  
 40 GCTGTTGAGT TTA 73

## (2) INFORMATION FOR SEQ ID NO: 2153:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2153:

CCCCCCTCCC CCCTCCCCnC CCCCCCCCCC CCCCCCCCCC GCCCCCCCCC 50

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2154:

TATTTTAGGC TTAGCATTGA TGATGTTGCT CATTTTCAAT AATATAGGAA TTATT 55

(2) INFORMATION FOR SEQ ID NO: 2155:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2155:

ATGCTTGCTG ATATAATGTA ATAGCGTCGT GATAACGTTG CTGGCTTATA ATATACATTT 60  
GCGAGATT 68

(2) INFORMATION FOR SEQ ID NO: 2156:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2156:

TAATCTTTGT CGTCGAAATA CAAACTAACT TTTGAGTTTA ATGATGAAGG TACGCATTGT 60  
GTATCACT 68

(2) INFORMATION FOR SEQ ID NO: 2157:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2157:

TCATTCATTT TCCTCTTTTC TTTTATTTAA AATGTTTCATG GTTGTTTCTC TTAATTCTGT 60

AGATGCTAAA TGGTCAAATT GAATAATTGT TTCTAGACTC ATTCATAAA TTTCGAAAAA 180  
 TAATTCCTCG GGATTACGTT TTTGTATTTT TCCAAATGTT TCATAAAGCA AATCAATTTT 240  
 5 ATCAGCAACT GAAAGTATTT GGCCTTCTAA TGAATCATCT TTACCTTCTT GCAGTCGTTG 300  
 CTTATAAACA TCTCTATATT GTAATGGAAT TTCTTCTTCA ATAAAGGTCT CTACCATTTT 360  
 10 TTCTTCAACT TGCGAAAATA ATTTTnnTAA TTCACTACTC 400

(2) INFORMATION FOR SEQ ID NO: 2158:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 232 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2158:

TATTTTTTTC TTCTAGGCAG TGTTAATACT GCTTCAATTT GTTTTTTTACT AAATTGATAT 60  
 TTCTCTATGA TTGAATTAAT CAATTGATTG TCCATTTACT TAACCCACAC TTTTCTTAA 120  
 25 ATTTACTCAT TTATTTTAAC ATATTCTAAA ATACTTCTAT TAAGATATGA TACTTAATGT 180  
 AATTTTCACT TCCAAAACAT TTA AACGAA TGATTAGGnC ATACTATATT nT 232

30 (2) INFORMATION FOR SEQ ID NO: 2159:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2159:

40 CCGTTTTTCC AAAA ACTTGA TCATAAACCC GTCCTTTTT TCATCATAAC AAAATAAGAA 60

(2) INFORMATION FOR SEQ ID NO: 2160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2160:

CGATTTACTG CACGACACAT TGCCACATCC TGGATGGGCA ATCTTTTCTC TTACCCGTCT 60

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2161:

ATTAGTTGAA GTTTTTGAGC AATTGAAAGA TATTCAGGGT CAAATAAAAA CGACAAAAAA 60  
 AGAATATCAA CAGACCAACA AAGAACTTTC TGCTGTAGAT AAAGAAATTA GAAATATAGA 120  
 AAAAGACCTC AATGATACAA AAAAAGCACA AAATGAATAC GAAGAGAAAT TGTATCAAGC 180  
 ATATCGATAT ACCGAAAAAA TGAAAACACG TATTGATAGT TTGGCAACGC AAGAGGAAGA 240  
 ATATACTTAT TTTTTCATG GCGTCAAACA TATTTTGAAA GCTAAAAATA AAGAATTAAA 300  
 GGGTATTTAT GGTGCAGTTG CGGAAATTAT TGATGTGCCA TCTAAATTAA CTCAGGCAAT 360  
 TGAAACAGCA TTAGGTGCTT CATTACnACA TGTCATTGnA 400

(2) INFORMATION FOR SEQ ID NO: 2162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2162:

GTGCGTACCA TTGTAATCTT CGTAACTGG GTAATTATTT TGTCTTTCTT CATCATAAAG 60  
 TAATAA 66

(2) INFORMATION FOR SEQ ID NO: 2163:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 72 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2163:

AGAATGGTAA CATGGTAATA ATAAAATATA AACAGAATAC TAGTTAATAC ACTTTATACT 60  
 AGAAAAAGAT AT 72

(2) INFORMATION FOR SEQ ID NO: 2164:



- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2164:

10 CGATAATCTG TTTTTTAA TCTGTTGCTG TTAGATTTAG CACCGATTCTG TTAACTTCA 60  
 AATAATTTTT ATTACCTTTG GAAGAAAGTG GAACTATTGT AACTGTTTCT TTTCCTTTAT 120  
 TGTCTTTGTT ATCTAATATT ACACAAAAAT GATTACCAGA AAACCTCACTT CCAATATTAC 180  
 15 TCCCTAGTTT TACATATACC ACTGTTCTCT TACnATATGA TTTATAATAT CTTTnTTTAT 240  
 TGCTTGTAAC ATCGCTATGT ATAGCAATTG GAATAAACT CTAGCCAATG AGGCATGTnT 300  
 ATAACCTTCA TGTTTTTACT GTCGG 325

20

## (2) INFORMATION FOR SEQ ID NO: 2165:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2165:

30 TAAACCCCTT TTGGGTAAAA AAGTTTGGGA AAATTTCCCC GGGGGGAAAG GCCCCCAAAA 60  
 AATTGTGCCC CTCCnCGGGG GAAAATTAAA ATTTCCCCC TTTTAAAGG GTTCCCCCTT 120  
 35 T 121

## (2) INFORMATION FOR SEQ ID NO: 2166:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2166:

45 CGGACAGTTA AATGAACTGT TCAATGAGCC CAGGATGTTG TAAATGGTTC GG 52

## (2) INFORMATION FOR SEQ ID NO: 2167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2167:

ATTACAGTAA AAAATGGATT AACATTACAA GCGTGTCTTG CTAGAGCAGC CAA 53

(2) INFORMATION FOR SEQ ID NO: 2168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2168:

AAAGATTATT TATTTGCAGT CATTAATTGT GATTTAATAC GGTCAGCTTT GTTTGAATGT 60

ATTAAATTAC nTTGAGCAGC TTTGTCTACT AACTTAACTG CTAAGCTTAC TAAT 114

(2) INFORMATION FOR SEQ ID NO: 2169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2169:

AAGGAACCCC CCCCCCTTAA AATTTTTGGT GGTTTTAAAA AATTCCTTTG GATTTATTAC 60

CTTTATTCTT ATnATTTTCC GTTTGGATTT TCCTGGATTA AATTTCCCCA TTAAGCCATT 120

TCCGCTTCCC TTATTTTATn ATTTTCCAAA ATTTCCAAAG GTTCCATTTG GGATTTTGGC 180

AATCCTTTTT TATTAAAATG GCCTAAAAAT TTTT 215

(2) INFORMATION FOR SEQ ID NO: 2170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2170:

TATCGTTTTT AGAAATGGAT GTTCTCTCCA AAGATGATGG TATCTAACAT TATCTTATTG 60

GTATCATTAT GCAACnTTA CAAAACATTT ACGCAAGATG ATACATTATC CAAC 114

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2171:

ATCACAGATG AGATAACAGA TCCACTGTAA CTTTACAATA AATAAATGGT ATCATAATTA 60  
ACACGTAAAT GGTTC 76

## (2) INFORMATION FOR SEQ ID NO: 2172:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2172:

ATTATCACAA AATGTTGACA CGCAAAAAGT TGGTCAGTTA TCAATATGGT ATATAAATCT 60  
GAGA 64

## (2) INFORMATION FOR SEQ ID NO: 2173:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2173:

AAAGGCCAAC CAACCAAAGG CCAAAATTAA CCGGCCAATT CCAAGGGGTT AATTAAACCC 60  
G 61

## (2) INFORMATION FOR SEQ ID NO: 2174:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2174:

CACCCCGCAC TCTCCCATCT TTTACCTACT GGCTTCTTTG CATTGCCCTG GCACCTCCGT 120  
 CCTCAGCCTC CCAGGCTGTA TTCATTCACT CCCTTACTGA GCACGCACCA TACACCAAGC 180  
 5 ACCATTCAAG GTGAACCAGT CAAATGAAGG CCTGGCTCAT TTTAATGGGG GACAATGAGC 240  
 ATTTTTGTGA CAATTTTCATG GAGTGATGAG TGCTGTGAAG AACTAAACAG GTCAGGTGTA 300  
 10 AGTGGCTCAT GCCTGTAATC TCAGCACTTT GGGAnGCCGA AGCAAGTGGA TCATTTAAGC 360  
 CCAAGAGTCA AGACCAGCCT GGGGnnACAT AGTGAGAnTC 400

## (2) INFORMATION FOR SEQ ID NO: 2175:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2175:

ATATCGTTTA AACCATCAAC AAGATTTTAT AGATGCAACT TTTACTGCGC TGAAATCAGA 60  
 25 TAGAGCACGT TTAAAAGAAG TGCCAGTTCA TGTGAACTT ATAAGTTATA TTTCTAAATC 120  
 AAAATAAACT GCTATCTAAA ACGCAAAGTT GATCAAAATA TCGATTTTGT GTTTTTTTATT 180  
 30 GAGAAATTAT ATAGGAGTGT CAATCGATGA TTTATTGTGA ACAGAGCGTT TAATATTAAG 240  
 AGACTGGCAT GAAGATGATC TGTTACCTTT TCAAAAAATG AATGCGAATT ATGACGTACG 300  
 TAAATATTTT CCAAGTTTAT TGAGTTAnCG nCGTTCAGAA TTAGATATGA GACCTATGGA 360  
 35 TGCGGTTATn AAAGATTATG GCCATTGGGA TTATTGCCnG 400

## (2) INFORMATION FOR SEQ ID NO: 2176:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2176:

TAAATCAAGG AAAGACATTT TAAGGTACGA AGGTTGATAA CAAAAAACCA ACAGATTTAG 60  
 50 GGGTATCAGA G 71

## (2) INFORMATION FOR SEQ ID NO: 2177:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs

- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2177:

GTTGAATTAG GCAGCAGGAT TATTGATGCT GAACTGTTAG AGTCAGATAA G

51

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(2) INFORMATION FOR SEQ ID NO: 2178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2178:

TTAATTAATG GTATTACAT ATTCATAACC AAAGGATAAA ATAATTGTGA AATTATTCAC

60

A

61

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(2) INFORMATION FOR SEQ ID NO: 2179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2179:

CATTTTACCA TGCAGCAAAT AATACAGGTG GTGCCGTTAA CAAACGTGA

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(2) INFORMATION FOR SEQ ID NO: 2180:

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2180:

GCCGAACGAA TCAAATACCA TACCTAATTG ACTGCAGGCA TGTCCATATA GTGCAGTTAA

60

50

CTGTCTACAA GGC

73

(2) INFORMATION FOR SEQ ID NO: 2181:

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2181:

TACTTTTGGC GATATTCGGT ATCGTTATTA CAGTTATTTT ATATGCAATT AAATTGCCGG 60  
 10 GTTCTATCTT TATCGGTATG ATCATCACAG CAATCGTTGG TATGTTCACT GGATTGATTC 120  
 AAATGCCATC TGGTATTGTG GGTAAGATTC CAAGTATTGA ACCAACGTTC GGTGCTGCAT 180  
 TTGAAGCGTT TAAAGACCCA AGTCAATTAT TAACGATACA GTTCTTAATT GTTATTTTAA 240  
 15 CGTTCTTATT TATTGATTTT TTTGATACAG CTGGAACATT AGAAGCGGTT GCAnCnCAng 300  
 C 301

(2) INFORMATION FOR SEQ ID NO: 2182:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2182:

30 TTGATTCGCC TTGGCCAGAA TTACTTTTGT TTTGGGCGTC ATTGCAAGTT TCTA 54

(2) INFORMATION FOR SEQ ID NO: 2183:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2183:

TTAGTnACAT TGGGACATTT AACTGATCCA CCAGTACTTT TGGCGATATT CGGTATCGTT 60  
 45 ATTACGTTAT TATTGCATAA TGCGGTCACT ACGAGACACC GCACTGAGTC CGATATCA 118

(2) INFORMATION FOR SEQ ID NO: 2184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

55

AGATAGTTAT ATAAAGATTT CATCTTCTGT ATTACATTGA TATTTTTAGG TCCCTGTATA 60  
TAAAAATCAT ATGCCTCATC AACAACATCA CTTTTATTTT TGATTGCAAT TTGATGTAAT 120  
5 ATCTTTTGAC TAAAAACACG ATTAATCATA TTTCTATTAT CCATAGCTAC GCACCTCCTT 180  
CAACATACAT TTAATGCTTA TCCTGTTAAT ATTATAAnCn ATTTTAAATG CCTATAGACA 240  
10 TTATTTCTAT ACACATACGA TTATnAAATT GTATTGAAAC CAAATGATGG TTGCCAAACA 300  
CAT 303

## (2) INFORMATION FOR SEQ ID NO: 2185:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 110 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2185:

CCGGGGTTTT GGTAAACCC TCCCAAnATT TTTTTTAAGC CCAAACCTTG GAAAAACCCA 60  
25 GGCCACCCGT TGGAATTTTT AAGCCTTGGA TTAATCCGGT TTGGTTAACC 110

## (2) INFORMATION FOR SEQ ID NO: 2186:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 86 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2186:

CCTATATTGT CACCCAACTT CATTACGGCA CCTTTACCGA AAGATTCTC CATATTTTTA 60  
40 ATTACTGTAT CTAAAGCTTT TTGACG 86

## (2) INFORMATION FOR SEQ ID NO: 2187:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2187:

TTTGCTAGAA AACATACCAC ATTTGCCAAT TATATTATTT ATTCTGATGT TTATTTTCGG 60  
55

TATTTAGAGG TGATAAAATT TGTCAACTAT TACAAAGACT AAAATAAAAA TCTTTATTAA 180  
 TTATTTTATT GGTATATTAG CCTTGGCGTT TGCTGCTTAT ATATTATTTA AATAAAGGTT 240  
 5 AGAGTGAAAC GTGTTTATGA ACTAGACGTT CTAGTATAGT TACTACAGCT TTAGTCAGAA 300  
 GGTATCATTG ATAAGATCAT ATTAAATCAA AGAGGCATTG ATATACACTA AAAAGAGGCA 360  
 AGATTACCTG CCTCTTTTTA GThATTAAAT ATACGTGTTA 400

10 (2) INFORMATION FOR SEQ ID NO: 2188:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2188:

TTTTATAAAA TATCAGACAT TTTGnTCAA CATACATCTC TTTCGATGTT TCTAATACTT 60  
 TATCATTAAC CATTACACCT TAAAGTTATG ATGTGGCATG TTTTCTTATA TTCATAACAT 120  
 25 CAATTTTATC A 131

(2) INFORMATION FOR SEQ ID NO: 2189:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 85 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2189:

CGTAAAATAT TTTGATTTAA AATGGAGGGT ATTAATATGA AAAGGTTTAT GTAAAATCTA 60  
 40 GGGGTATTCC AATATTATAA GGCAC 85

(2) INFORMATION FOR SEQ ID NO: 2190:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 224 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2190:

CCCGAGGAAT ACATGGCATT AAATACACGT TTAATATTTA TAAAGGTGAC TTAATTTTGT 60



ATAATTGTTT ATCAGTGATA AAATATTTGC AATAAGAAGA GAATGACTAA ATAATCTTAA 180

TTTTTCAGAnA AGTAATTGTA ACCTTACTGG TCTTATGGTA ATAn 224

(2) INFORMATION FOR SEQ ID NO: 2191:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2191:

AGCTTTTGTA GTTTTCTTAA GCACACCGGC GATTTGATTA TTACATAAAG GATTCCCTTT 60  
 TTTTGTTGTG AATATGAACC CTCTGTCAAC ATAGCTCGAA TTCCATCTTT TCAACATTTT 120  
 GTTTCCAGT ATTATCTTTT TAAAAATTTT TACGGTTCTA GAATTGATGC TGATACTTCT 180  
 TTTTGAACCT ATAGTCTTTG TAGTGTCTTT GTATCCGAAT CCTTTCTCGT ATTTAATGCG 240  
 GTGAATTGTA CCTGTTATAT TGATAGTnTT GTTTAATAAA TCTATATCTT TTTCTGCGAG 300  
 TGCTTGTAAGT TCTCCTATGC GCATACCAGT TAAAGCCTGT ACTTCTAAGA TGCTGGCAAT 360  
 TAAAATGCGA TTTGCTTTT GTAACCTATT ATCATTAGT 400

(2) INFORMATION FOR SEQ ID NO: 2192:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2192:

GACGACTGAG AGGCCGTTGA ATTTGACGTT GCCATATnTT CAAATTTAAC 50

(2) INFORMATION FOR SEQ ID NO: 2193:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2193:

GTTGTTTTCA TATCAAAACA CCGTAGAATA AACAAATGAAT GGAATTACTT TTGCAATGAT 60

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 56 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2194:

CCAGTCACTG ACTACGTCTT CTCGGTGCT GGCGGTGGAG CCATTCCCTT ATTACC

56

(2) INFORMATION FOR SEQ ID NO: 2195:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 69 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2195:

GTAGGGAAAG GAAAAACTGC TTCCATTGGG AAATGTTAAA CCTTGTCCT TGGTGATGCC

60

ATTGGATTT

69

(2) INFORMATION FOR SEQ ID NO: 2196:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 55 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2196:

ATATGACACT ATATTTTATA AACATACATT TAATGATTCA TTATACAATT GCCAA

55

(2) INFORMATION FOR SEQ ID NO: 2197:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 71 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2197:

GCCCTAGTTC AATCATATAA CCATCTTTAC GATACGATTG AATCTTTCCC CCCGGACGAT

60

TCGATGCTTC A

71

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2198:

AGTAGCACAA CAGCCATGCG GAGACAGAGA ATCGTTAGAG ATTAATGGAG ATCA

54

(2) INFORMATION FOR SEQ ID NO: 2199:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2199:

GGCGGTTTTA TATTTATCGT TGCAGTTATG CAAATTGTAC TTGGTAGAAG TATAGATTCT 60  
 CGTGATTTCGA AAAAAGTACT TTTAACGGGA TTGGGAATAG TAATCATATC TAGCTTTATT 120  
 TGTGCAGTGA CACATAACTT TATATTATTT GCTATATCAA GGTATTTC AAGCAATTGGT 180  
 TGCGGAATTA TTCCTCTCGT GACTTTAACT TTATTAGCCA AACTAAGTAC AGATAATGGT 240  
 AGAGCTCAAG CTATGGCGAA CTATCAAATA TTTTATCAT GTGCACCAGC TTTGGCACCA 300  
 ATCTTAGGGA GTACTTTAGG TGGCAAGATG GGGATATATT GGTATTTTAG TTTTTTGGCT 360  
 CGTTATATCT ATCGGTATTA TTTTGGATA nCTnTnTTAA 400

(2) INFORMATION FOR SEQ ID NO: 2200:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2200:

GGATATGCGA TGGATGACGC ATTGCTATAT CGGCAATTGn GAAGCTGCTG

50

(2) INFORMATION FOR SEQ ID NO: 2201:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2201:

ATCGAATATC ACTACTATCT CTnTtnAAGT ATCTACAATC TCTCCAATCT

50

(2) INFORMATION FOR SEQ ID NO: 2202:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2202:

TCGACAATCC TAATGCAATT GCTTCATGTG GntGTGGTAG TTCATATTAG AACTGCAAAA 60

GTTGCAGGTG ATCCTGAAAA TTGCTAATAA AATAACTTTT TAATGGTTAA CCCAATTTTT 120

GGGATACAAA TTGATATCAA TAACGATTAA GGACATATTT GATTATGTCC TATTTTTGCG 180

TAAAGATATT TTGTTTTATT AAAAAGCTTA TTGAAAATTA AGAATCTGAC TATAAATAGT 240

ATTTTAAATG ATCGTGATAG CGGATACATT TTTAATCGAA ATCAGGCTAC GAAAAAATTA 300

ATTAATTTTT TCACAATCTG ACTGAATCTT GCTTGAAAAT ATAACATAAA AGCTATAGAA 360

TTAGTATTGG ATTAAAAATG TCTTTTTTGT GAACATCACA 400

(2) INFORMATION FOR SEQ ID NO: 2203:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2203:

GCGTTGTCCT TTTCGTGACA TGAAACAATG TGGAAAACAT AATTAAATnn AGGGAAAGTG 60

TGAATAGTTA AAAAATTAGT ATTGTGTTAT AAAAAATAAT TAATACTGTT AGGATTTTCAT 120

TAACATACTT AACGTTGGTT CAAAAATAGT TAAAAAGAGG TTAATTCATA GCGCAGTATC 180

TCACCTTATAT AATGATAGTA GATTGTTCGT ATTACGTAAT TGAATTAATC ATATAAAAAT 240

ATATTAAGAC AAATTTTATAA ATAGATTGGG AGAnTAGTAC TGTGAAATTA AAAACGTTAG 300

CTAAAGCAAC ATTGGCATTG GGCTTATTAA CTACTGGTGT GATTACATCA GAAGGCCAAG 360

CAGTTCAAGC AAAAGAAAAG CAAGAGGGnG TACCACCATT 400

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2204:

GTTATTTTGT ATGGTTAGTC TTAAAAATAn ATATAGATAT TAAATATTTA TTTTACGAAT 60  
 TGTTAAGTAA AGAAAAAATA TTAATCAATC CGGGTTACAT TTATGGCAGT AAAGAAAAGA 120  
 GTATAAGGCT ATCTTT 136

## (2) INFORMATION FOR SEQ ID NO: 2205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2205:

TTTTATTTTT TCGCAATGAA AAACAATCTT TCTGCATCTT CATTATGTTT ATCTATATTA 60  
 AAATCAGTAA ATGTTTCAAC ATGTTTAAAA CCAACTTGAG CTAACCAAGA CAAATATGTC 120  
 TTTTCATCAA ATGTTCTCTG AAAATGAGAC TCATCAAATC TTGAATATGT TTCATCTTCA 180  
 TGTCGAATGA AAAATGTCAT ATCATGATAA ACACTTAAAG GTAAATCTCC TTGCACAGCA 240  
 TCCCATGCTA AAAAAATGTC CCCTTTATCA TCAATATAAC TTTGATTATT AAACAAAGTC 300  
 ATCATTTTAT AAACAGTATG TACATCAGAA ATAAATACAC CTGAATCAGT CAGATGATGA 360  
 TAAACATTGA TGAATGTTTC AATCACTGCA GTTTCATCTT 400

## (2) INFORMATION FOR SEQ ID NO: 2206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2206:

TTGAATATCA TATAAAAACA TCAGGTTCAA AGTTGACTAC TCTTAATAAT ATAAAAATAA 60  
 GAATTAAAAA CATTAAACGA TACTGCTCTG AGAACTTGCT TTAAACAAA CTTGATACAA 120

GTCAACTCGG AGATATGAAA GGAGCnATTA AATATGCAGT TAAATTTTAC AATTATCCAA 240  
 ATGAATATTT GTTAACTAAT GTCAAAATTC CTAAAAGAAG AnAAACAATA GAGGATATCG 300  
 5 AAAAAGATGA ATCTAAAAATG GTACCACTAT TTAGAAATGG AACCAAGTCC TACnGATACG 360  
 TGATCATATA CTAATGGAT 379

(2) INFORMATION FOR SEQ ID NO: 2207:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2207:

20 CATCTTGGGA CGTTTTAAAA AGTAACGTAG CGAAGACTAT TGGAACAACA ATGAGAACCA 60  
 ATGCTAGAAG GATCAAAAAG TATTTTAAAA ATTTATTCAT GATTGATGCT CCTATATTAA 120  
 ATTTnTGTTA AATCATA 137

25 (2) INFORMATION FOR SEQ ID NO: 2208:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 72 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2208:

35 GCGCCGCTCT GTTCATTTTA CCTAAATCCA ACGTTTCAGG AATAGATGTT TTCAAACCAC 60  
 TTTGAAATGG AT 72

40 (2) INFORMATION FOR SEQ ID NO: 2209:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2209:

50 ATGTAGCAAC TAAAGATGAT AGTGGATAGC GACACGGTCA ATAACTGCC TA 52

(2) INFORMATION FOR SEQ ID NO: 2210:

- (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2210:

10 TTTTTTATGT TCTTTTTTAA TAAGAGGGAA GTGAAGTTGT ATAAAAATGT ATTAAATATG 60  
 CACTTTTTAT ACATTAAACGA TTCATATATG TCTATTATGT ACCAAATTTA TAATTTGTAT 120  
 AATTTTCGAA CTGGTTAAAT TCGAAAAATA TCACTAATAT ATnTAGATCG ATGTGTAACA 180  
 15 TTACGTTCTA nTAATTTAAT GTTGCA 206

(2) INFORMATION FOR SEQ ID NO: 2211:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2211:

ACGATGTATT TTGATATCGT TACCAAAGTC TTTTAATAAC TCATTTTCAT CTAAATAAAT 60

30

(2) INFORMATION FOR SEQ ID NO: 2212:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2212:

40 TGATAAGGTT TGTCCCATCG CTATTTGAAA TGATGCATTG TAAAAAACTA TCATTTGTTG 60  
 GTAATATCTT AGTTCGATGA CTTTCTTTCC AATCTTCCG TGTCATAGAG ACAAGATTTT 120  
 TTGTAGCTAT CTTAGTTGCT TCTTGAATGT TCATTTGTTA TTCCTCCTTT TAAGATGTTT 180  
 45 GTnTTTCTTT AAATGCTAAA ATAATTGATT TCTTTTATC ATTCGTGAAT ACGAAATTTT 240  
 CGTATTCATT ACCTAAAAAA ATATCATCAT ATTAAACATT AAAAGCACTC ATATACTTAG 300  
 50 AAAGTAAACT AAcnTTAATG GnTGTAGAGT C 331

(2) INFORMATION FOR SEQ ID NO: 2213:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 61 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2213:

AGCATAAACC AAAAGATGCG GATATACTTG AACGCGTCAA AGATATACTT AATAAAAAAG 60

10

A 61

(2) INFORMATION FOR SEQ ID NO: 2214:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2214:

TCTATTTGAG TTTACATTTG ATTAAATGAA TGACAATTAT ATGAACCTGA CTTGGT 56

(2) INFORMATION FOR SEQ ID NO: 2215:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2215:

ATACCACTAC TATACAGTTA AATTAATATA CGTTAAAACT TTAATCCGAT ACATTGGTTA 60

AAATGATGTT CCTCGCTGGT GGATCGAGAC ATACTTCGCT CTGACTTCTT TAGTCAGTTT 120

TTTTTCAGCT TTTTAGGTGT AATCACTGAC TTTGTTACAT CACGTCAAAT TTACAGTCGC 180

TATTATCTTA ACTTATCnAC GCTTATCACA CATCAATTCA GATATTATAT TGCATTGGCG 240

nCTATCACTT TGAACCTGCT GTGACTGGAA CTACTGGCTG TCAnGAGCGA GGGCTGATAA 300

TGAGCATAAA GCAACATATA AGTAATACGG CCGAATATGT AAATTCGGCA GCTTTAGGCA 360

ATGCTGCCCCG GGCATGACTA GnACATTAC AAGAAGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 2216:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 133 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2216:

TTTTTAAAAA AGGGGTTAAC CAAAGTTTGT GAACCCCAAA AAATTCCGGA GTTAAAAAAA 60  
 5 CCCCCAAAAA TTAAATTAAC CGGTTATTCC GTTCCAGGAG CCAAATTTT ATGGTTCCAA 120  
 TTnCCAAAGT GGG 133

(2) INFORMATION FOR SEQ ID NO: 2217:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2217:

20 TACTCGTACC ATTAACCACT CTGATTAACC ACAATACTAA GGTATTCAAT ACATCACTGA 60  
 CATC 64

(2) INFORMATION FOR SEQ ID NO: 2218:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2218:

35 TATTCTATAG AATATGGATA ACGTTTAACA TGATGTAGAG TATTCATCAT TGTAACACGT 60  
 CAATTTGATA TGTGAGATTAC AC 82

(2) INFORMATION FOR SEQ ID NO: 2219:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2219:

TTTGACGCAA TGATTTAGCT GTAAATATGC AATCTAAAGG AAAGTACCAC TTATGAGATG 60  
 50 TATTAAAACG 70

(2) INFORMATION FOR SEQ ID NO: 2220:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2220:

10 AAAAAATTACC CCAAAGAATT GAAAATTTGT TGTTTGGGTT ACCGGGTTTA AGATTAATCC 60  
GGTTGA 66

(2) INFORMATION FOR SEQ ID NO: 2221:

- 15 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2221:

GATCGCAACC AAAATAATGG TCTTCCTGGA TTATTACTTT ACCAGCTGGC ATAC 54

25 (2) INFORMATION FOR SEQ ID NO: 2222:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2222:

35 GTGTTGCTAC AGCTAnCATT TCATATTTAA CGnGTTGTGG TATTTCTAAA 50

(2) INFORMATION FOR SEQ ID NO: 2223:

- 40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2223:

AATGGGGGnA CCCAGCnTGA GTTATGTCAT CATATCGGTA TGTGATACAT 50

50 (2) INFORMATION FOR SEQ ID NO: 2224:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2224:

GTAGATGCGC CCTCATATGG ACAAAGATAA AGTATCAGCA GATTGGACGC TTTA 54

10

(2) INFORMATION FOR SEQ ID NO: 2225:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 63 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2225:

20 CGAGACTTCA CTTTGACTAA ACGCGTTAAG AATTTAGATT ATGCTTACGA TGAAGAAGAA 60

TTA 63

(2) INFORMATION FOR SEQ ID NO: 2226:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2226:

35 TGGCCATTTT TAATGGGGGG AAACCTTAAA AAGGGGTTTT TAATTTTAAA CCAAG 55

(2) INFORMATION FOR SEQ ID NO: 2227:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 131 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2227:

45 TCCATTTGGT TGCCTTCTTT AAATAAACCT TGGATTATGC CTTTCCTCCG GTTAATTAAT 60

GGGACCAGGG GCCAAAAATA CCCCTTTTAA AATATAnATT CCCAAAATCC ATAGTTAAAT 120

50

AATCCATTTG C 131

(2) INFORMATION FOR SEQ ID NO: 2228:

55

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2228:

10 CCATCTGTGC TTCGTTAGGC GCTTTCGGCA TCACGGTGAT GGTTCGCGAC AGATCCGCCA 60  
 TCCGGCTGAA TGGGAAGCCC GCGTTA AAAA GCGCGTAGA TCCGGCATCG GGATGAAGTG 120  
 GTAATACTTC GAGAAGTCGA TGGTGGAGTC GTCACCAATC ACCACATGAT TCTGCACCGG 180  
 15 CTGGAAGGTA ATACAGTTAT CCACCGAACC GCCCGGCATC GGGTTCATAT ACTCAAAGTC 240  
 GAAGCGCACT GGnTTTGGTC GCGCCCAGTT TCAGCGCCGG AATAGAGACA TCTGTTTTGC 300  
 CATCCAGCAA ACCTTGTAAT ACCGGAnTCC GCAGCAGCAG GCGGTTTCGC 350

20

(2) INFORMATION FOR SEQ ID NO: 2229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2229:

30 AACTAAAAAT ACTATATAAA AAAGGTTGTT ATAATTTAAT GGATATAAAT AAAAACGA 58

(2) INFORMATION FOR SEQ ID NO: 2230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2230:

45 GGGCGAAAGC TGGACGGAGC CAACGTCGCG TGAGTGGATG GAAGGTTCTT 50

(2) INFORMATION FOR SEQ ID NO: 2231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

AGCCATACGT GGTAAGCACA TGCTAAATTT GCCAGCCTGA AAATGTTTAG

50

## (2) INFORMATION FOR SEQ ID NO: 2232:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2232:

TGTATCATTT TGGCAAAATC ATAATCTTTA TCGTCGAATA CAACTACTTT TAAGTTTAAT 60

GATGAAGGTA CGCATTGTGT AATCACTTCA TCTAACTTTT TTAAATCAGG TGTCATAGTT 120

GAACTTGGrG GT 132

## (2) INFORMATION FOR SEQ ID NO: 2233:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2233:

GATCTTGAAG CAGTTGAAAC ATATGTATCA GATGCATTAA GACAAGTACA CTTACAATCA 60

GACATTTTTG CTGTATCA 78

## (2) INFORMATION FOR SEQ ID NO: 2234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2234:

TTTAGGCACA GACGGTAATA AGCTACAATT TTCATAAAAT CATCTCCTTn 50

## (2) INFORMATION FOR SEQ ID NO: 2235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2235:

ATCCTGGAAA ATCTGGTAAG ATATCTTGGA AATAACTAAT ACCAATTCCT AAAA

54

(2) INFORMATION FOR SEQ ID NO: 2236:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 54 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2236:

GGGTGATGGT CATTGACAAA GTCAACTTGT GATAAGCCAT GGATATTTTT CGTT

54

(2) INFORMATION FOR SEQ ID NO: 2237:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2237:

TTATTTACTT TAAATTTCTC AATCTACAGT GTAATCTTAT TTCTTATTAT

50

(2) INFORMATION FOR SEQ ID NO: 2238:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 74 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2238:

CCTTAATGGG TTTTGGGGGG GGGCCCCCCC GGCCCAAAAC CTTTGGCCCA ATTGGTTCCT

60

GGGTTAAGGA AAAA

74

(2) INFORMATION FOR SEQ ID NO: 2239:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

CCACCCATGG CGCTTGACAA AATATGGATG GAACATAACC ACACCGTCCA AGTTCACTGT 60  
TAGCACCGTG T 71

5 (2) INFORMATION FOR SEQ ID NO: 2240:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 64 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2240:

CAGCTAGGTA GTTAGGGATT CGACTCGTAA AACGGATTAA TAGGTTTTAT AAGAAGGGGG 60  
TTTG 64

20 (2) INFORMATION FOR SEQ ID NO: 2241:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 58 base pairs  
    (B) TYPE: nucleic acid  
25     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2241:

CTTGACACGT ACATCTAATA CGACAGTCTG TGC GTTTAAA ACCTTTTGGG TCAAAC TG 58

(2) INFORMATION FOR SEQ ID NO: 2242:

- 35 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2242:

GACTCATCAC CGnTTGT TAA GAnATACAAT TTATTACCCA GCAnTTAACA 50

45 (2) INFORMATION FOR SEQ ID NO: 2243:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 71 base pairs  
    (B) TYPE: nucleic acid  
50     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

AAATTTGGAT TGGTTGAAA TTTACAGTTA AAATTTAAAG GGTGGATGGA AAAATTTTAG 60  
GAACTTCTAA G 71

5 (2) INFORMATION FOR SEQ ID NO: 2244:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2244:

GGGGGCCCCCT TGGGGGTTTG GGTTTTGGGG GGCCCCCCTT TAAAAAAnTT 50

(2) INFORMATION FOR SEQ ID NO: 2245:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
25     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2245:

30 TTATAATTTT TGAAAATAGA AGAGGGAAGC CTTAAATTAC CAAATGGATT TA 52

(2) INFORMATION FOR SEQ ID NO: 2246:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 55 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2246:

ATTAGTTGAA AAGTACAATA TTCCGCAAGT TACCAATCGA TACAGGTATT ACAAG 55

(2) INFORMATION FOR SEQ ID NO: 2247:

- 45 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
50     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2247:



## (2) INFORMATION FOR SEQ ID NO: 2248:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2248:

GGGAAGGTAA AACTTCCTGC TTTTTTTATA AGTATTCATA CTCTATTGCT ATATTAGTAG 60  
 AAACCGTAAA ATCAGTCATT CACATACATT ntGAAACATC TAAATAG 107

## (2) INFORMATION FOR SEQ ID NO: 2249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2249:

GTTGGATACC TGnAACTAAA TAACTATTCT TTAAAAGTTA AAAACCAACC ACTAGTGGCC 60  
 ATTGGGGATT AAAATTCCAA CCTGGGCCGG TCCATCCCCA TGGTGGGTAA AATGGGGGAG 120  
 GGAAAATCCT TATTAGCCAA AGGATTCCTT ACCTAATAAT AGGGGGAA 168

## (2) INFORMATION FOR SEQ ID NO: 2250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2250:

TTTAGTTGTG ACATACTGAG AACTGTAGTA CTTAGTGCnA TACCAAAGGG 50

## (2) INFORMATION FOR SEQ ID NO: 2251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GCAGAACATA CCACGTGTCG CTGATTACCA ATACAGTAGA TCAAGATGGA CTCGATTGC

59

(2) INFORMATION FOR SEQ ID NO: 2252:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2252:

GTTTGTGTTT TAATTTTAAG GCGAAGGGAT TTTTACCA AATGGGAATT TT

52

(2) INFORMATION FOR SEQ ID NO: 2253:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 80 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2253:

AGTGTAATTA GAAAGGCAAG TACACCTGTT TAAAGTTTAT CTTCTAAGAT TTGTTTACTT

60

TAGAACTATA GCAGTTAATC

80

(2) INFORMATION FOR SEQ ID NO: 2254:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2254:

GTAAATGACA GAGGAAATAT AACAAATGATT AATAATGTTA CAGCATTTAC TGCAAATATC

60

TACTAT

66

(2) INFORMATION FOR SEQ ID NO: 2255:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

ACATGTGTTA ACTCTTTGGC AATATATCCT GTTTCTTCTT CTAATTCACG

50

(2) INFORMATION FOR SEQ ID NO: 2256:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2256:

AATCTTTTAT AGGAAAGAAA GAAGAAGATG TTATCAGTTG CGATTATCGG CCCAGGCGCT

60

GTCGGTACA

69

(2) INFORMATION FOR SEQ ID NO: 2257:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 64 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2257:

TAGCGGGAGA TAGAAAAACC ATTCCGCATT AGCTTTGGTC AAGTTGGGAA TGGGTAAAAA

60

AATA

64

(2) INFORMATION FOR SEQ ID NO: 2258:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2258:

GGTTAAGGTA TGGCGAAATA TCTCCAACAA CACTTCAAAA GGTTCAGAA AATAGAAGTC

60

GACTGAACAA TGTCATTAC ATGTGTGCGT CATGCACACC nTATGT

106

(2) INFORMATION FOR SEQ ID NO: 2259:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 79 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2259:

CGGAATAACT GACTATGTAT CATTTGATGT TATTAAACATC AATATTTTTG GTTAAATGAT 60  
5 ATGCTAGAAA TAAAGCATA 79

(2) INFORMATION FOR SEQ ID NO: 2260:

(i) SEQUENCE CHARACTERISTICS:  
10 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2260:

GCTGGnTGTT AntGGCAGAG CATGTGAGCT GGATAATCAG TTGGAGAGGC 50

(2) INFORMATION FOR SEQ ID NO: 2261:

(i) SEQUENCE CHARACTERISTICS:  
20 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
25 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2261:

nCCATTAATG ACCGAGATTA GTGAGCATGC ACAAATTGTT ATGGTAGGAT 50

(2) INFORMATION FOR SEQ ID NO: 2262:

(i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2262:

45 AATGAACCAC ATAATGACAA CTTGAATGAC AATATGAATA TGATGTCAAC A 51

(2) INFORMATION FOR SEQ ID NO: 2263:

(i) SEQUENCE CHARACTERISTICS:  
50 (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
55 (D) TOPOLOGY: linear

CATTAGGTGC TTATATAAAT TACTTTGTGG TGGCTCCAAA ACTTCGGGTT AAAAC

55

(2) INFORMATION FOR SEQ ID NO: 2264:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2264:

TTTChTCCCC CCCCCGGGGT TTTTGGTCC CTTTTTTTTT TTAAATTTC

50

(2) INFORMATION FOR SEQ ID NO: 2265:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2265:

TCATTCATAG AGGTGTAAAG ACATAAGGGG AGCTTAACTG CGAGGACCTA CA

52

(2) INFORMATION FOR SEQ ID NO: 2266:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2266:

AGATGATGCA ATAATGGTGC AGTATAGAAG TACTGAGCAA TGCAAATTTT AGACG

55

(2) INFORMATION FOR SEQ ID NO: 2267:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2267:

GTTTCATCACA TTTATTACAT TCAGCGTTGG AATCAGTACT GGGTTATCAT G

51

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2268:

CTGTTGACAA CAAATTAAAA ATGACAACAT GTCGTAGTTA TAGTTAATTG ATTG 54

(2) INFORMATION FOR SEQ ID NO: 2269:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2269:

AACCAAAAAG AAAGCAAGGT CAAGGAAATT TCAGCGnGAC GTATCTTTAG TTTTGAATAA 60  
 GCATATTAAT ATGGTGATAA TATGCAAGAn AACCTGTTTA TTCGATTCAA TGAAATTATA 120  
 TTATTAATAT ACTTAATCAG TATCATTTGC TATTTTTATG ATTTTGTACA AAAAAGTCAT 180  
 AAGATTAGAA GTTTAGGCAT ATATTTATTG GGGATTGTTT GGGTTTTTACA AACAACTCTCT 240  
 TTATCTATTT TTATTATACA AACTAGACAT ATTCCATTAG GgNCTATTTT AGATGTATTC 300  
 TATACTTTAA GT 312

(2) INFORMATION FOR SEQ ID NO: 2270:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2270:

GTTGATGGAT TCTCTTGGTT TGGTGTAGTC ACAATTTCTG AACTGGCCCT TGTTTACG 58

(2) INFORMATION FOR SEQ ID NO: 2271:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2271:

CGTTCAGACG CTAAATCAGG CACCAGGTTG TACAATTGTC CTGGTTCTTC

50

(2) INFORMATION FOR SEQ ID NO: 2272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2272:

CAGGTGTTGG TAAACATTT GAGATGCTTT CAAATGCCAT TGAACATTT CAAAGTAA

58

(2) INFORMATION FOR SEQ ID NO: 2273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2273:

TTATAAATTG GTGTAACAAT TTCATACACA TGATCATTCT TTGATTGAGG TAAAAATGAT

60

TCTACTAAAC GTACACGTTT ATGCTTCTTA TATTCTTTCA TCAATAAATA TCTATGATTA

120

GCTAATGATA AATTTAGTAG AAGCTTGTTA TCTCCATAAA CTAAATTCAC GATATTAGGT

180

ATATTGAATT GTTCTTGATA TTTCAAAAAT TGTTGATCCC ATTCTTCATT TTTAGGTAAA

240

GGTAATACCA TCTCGTTAAT TTTCCAATAT GCTGGTTTAA GAATGACATT TTTATATCTG

300

ATTCGTGGTG AATAACTAAA TGAATCAATA CTCACATCAT TCATAGGTTC AATGCATTTT

360

ACAGATTCCA TTGAAATTTT TCGTAACAAT CGATATnaAT

400

(2) INFORMATION FOR SEQ ID NO: 2274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2274:

GGGTACAAAT TTGTnGATGA TAGAAAAGTT CGTATCGCTA GAAAGTCTGG

50

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 65 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2275:

TGATTTACCA GTTGATTACG ACAAAGAAGA ATTTTCAAGA ATTGTTGAAG CATCAAAACG 60  
CATT A 65

(2) INFORMATION FOR SEQ ID NO: 2276:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 55 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2276:

ATGGCGTTCC ACCAGCAGTC AATAATCCTG TTGGGATAAA TGCCAATACT GTCGA 55

(2) INFORMATION FOR SEQ ID NO: 2277:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 76 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2277:

TAATAAATCA CGTGCAATTA CGCTCACTAG CTTTCATCTC CTCATTTTTG CTTTTCAAAT 60  
TTATTAAGTA TGAATA 76

(2) INFORMATION FOR SEQ ID NO: 2278:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 65 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2278:

GTGGCTTTGT CTGTGTTATT GTAGTTTTGT TTCGCTGCGT CCAGCTTTGC TGCTTTTCCC 60



## (2) INFORMATION FOR SEQ ID NO: 2279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2279:

TTAAGTGCCA AAGTCCTTGG TAGCCAGAAT GAACCACCAA CCTCCATTTT TCCAAAAATG 60  
GTCTTACCT 69

## (2) INFORMATION FOR SEQ ID NO: 2280:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2280:

GGATGGAATT GGGTTAAGAA TAAAAAAGGT AATAATTGAG TTTATGATAA TAATAATAAT 60  
ATTGAGA 67

## (2) INFORMATION FOR SEQ ID NO: 2281:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2281:

TTGTTACTTC GGCACGGATA AATCCACGTT CAAAATCAGT ATGAATGATA CCAGCACATT 60  
GAGGTGCAGT CATACC 76

## (2) INFORMATION FOR SEQ ID NO: 2282:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

AACCCAGAAG ACTTATTATT AGAATCTTAA TCCACAACAC AAAATAGTTT ACTATTCCTA 60  
 AAAGCGGGAT TAAATCAATA ACAAACAGCA GTAAGATTAT TTCCTAGTCG AAATATCTTA 120  
 5 CTGCTGTACT TTATTTn 137

(2) INFORMATION FOR SEQ ID NO: 2283:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2283:

ACAAAGATTT ACTATTTAAC TAATTTATAT GAAGAATAGC TTTCCCTAAT AA 52

(2) INFORMATION FOR SEQ ID NO: 2284:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2284:

ACTCCTGCAT ATCACAACATA GATTAAATAT ACATCAAACA GATATAGTAA A 51

(2) INFORMATION FOR SEQ ID NO: 2285:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2285:

CTAACATGTG TGAACGATAT GCAAATTCAA TATCTCATTG ACGCTTTGCA CTTTATTACT 60  
 ACAATCAACG TAACTAT 77

(2) INFORMATION FOR SEQ ID NO: 2286:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2286:

AAACCTGTAT TTTTAATAAA CAATCGCTTG GACCTATTCA CTGCAGCTCT TCTGGGAC 58

(2) INFORMATION FOR SEQ ID NO: 2287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2287:

AATTCATAAA ACCAATAAAT AAGAATTTTA TAGTAAAAGG AAATGGAnTA GAGTTGGCAG 60

ACTTATACAA TATTAAAAAC AAAGAGCTTT TCACGATTAA AAGAGGAATT AATACATCTT 120

TATCTCTTTA TAGTCTAGAA CAGGAATATA ATAACAATTA ACGCCTTAAA ATATCCAGAA 180

TCATATAATT TTGAAGAATT AATA 204

(2) INFORMATION FOR SEQ ID NO: 2288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2288:

GCTCGTAAGG CGTCAACTGT GGCCTTGGGT GCTACATGTA AAGGTTACTT 50

(2) INFORMATION FOR SEQ ID NO: 2289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2289:

TCGCTTCGGT GGTAAAAATG TCGTGGAGGT CCCGTTGCAG ATGGTTTTAA ACG 53

(2) INFORMATION FOR SEQ ID NO: 2290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2290:

5 TTGGAGGTCA ATGTTCCGGCG TAATCTTCAA TGTTTCCGTA CACAATTGCT GCGGTTGACA 60  
CACATACG 68

(2) INFORMATION FOR SEQ ID NO: 2291:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2291:

20 TTCGACGAAT TAAACAAAT CCTTTTATAT GTTGAAGTGT ATTCGAGATT AAA 53

(2) INFORMATION FOR SEQ ID NO: 2292:

25 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2292:

ATCAATTGTC AACATCTAAT ATTCACTACC AATTATATCG CCACATGTTT TTTAGCAGTA 60  
ACA 63

35 (2) INFORMATION FOR SEQ ID NO: 2293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2293:

45 CGACTCAGGT CCATCAAGAG AGACACATTT CGACTACAGG TTATTACTTC TTTGA 55

(2) INFORMATION FOR SEQ ID NO: 2294:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2294:

AAATTTTGGT TAATTTTAAA ACCAAAAAAC CTTGGAAGGA AATGGCCCTT TTCCCAATTT 60

T 61

(2) INFORMATION FOR SEQ ID NO: 2295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2295:

AATCTTAAAA CCTATGGCGT CTATTACATT CCCAAAACCT ATTTTCAGnA ATGTTACCAA 60

TTAAACTTGC CGGGGTATGG ACCAGGGTAC CAGGCTAAAA ACTGGAAGAA AGGAAGGAAT 120

TTTAGAAAAT AATTTATTAA CATGGACCAG GTAACATA 158

(2) INFORMATION FOR SEQ ID NO: 2296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2296:

TGTTCCAACG ATGAATGTTT GCATGCTTTG TTGCACTGAA ATTGATGAGT TGCTACTTGC 60

AATCCTAG 68

(2) INFORMATION FOR SEQ ID NO: 2297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2297:

GTAGGGATTT TTTTAAACCG GGATAGCCCA ACCAAAATTT AATTAATTTT GGGTTTTTGG 60

ATTGAAGGAA TT 72

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2298:

AAAAATnTA CCAGGTGAAA AATTATTTTG GTAGGATTTA AATnTAATGG TTAAATGGT 60  
 GGTtTATTAC CTAATTtAAA AATGGTTAAA AGGGCCTTTA CCATTTTTAA AATTtAATCC 120  
 GCCTTTTGGG AGGGGGATTT TAGGGATGGT CCAGTTAGGA CCCCATTACC ACTGGAAACC 180  
 AACTTAAAAT TTGACCAAAT TTCCTGGAAA AAA 213

## (2) INFORMATION FOR SEQ ID NO: 2299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2299:

TATTTTtAAA GGAGGGTAAT AATCTTAATT TAAGTTCATT ATTTTtACTT TCATTATAAA 60  
 TATTTAATGT TACTTTCTTA TTTAGATAAC AATAAAAAAA TATAATCTCT nAAAACCCAA 120  
 TGAAACAGCT GCTCCAAACA ATTAGTTCTT CTAATTGAA 159

## (2) INFORMATION FOR SEQ ID NO: 2300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2300:

ACAAGGTCAT TCGGATTTGA CTTTGTtTCA ATTGTtAAAT TTTGCTCCAT CAATTGTCTA 60  
 ATTCT 65

## (2) INFORMATION FOR SEQ ID NO: 2301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2301:

TTTATTCTTA TTTAAAAACC CAnTGAAAGT AnTCCTTTnCA TTAnTAAAAA

50

(2) INFORMATION FOR SEQ ID NO: 2302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2302:

GAGATATATG CATGAGCTCT ACGACTTCTT TAGGTTTCAT GGC GACTATC CTGGCAGGGA

60

TG

62

(2) INFORMATION FOR SEQ ID NO: 2303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2303:

ACCAATCCCG TTGTTTTGGT TTTTAAAAA AAGGAAATTC CAAAAATCCC CCATT

56

(2) INFORMATION FOR SEQ ID NO: 2304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2304:

TTTAAAAACC AACGGGTTTG GTTAAAATGG CCTGGGCTTT TCCAAAACCTT GGC

53

(2) INFORMATION FOR SEQ ID NO: 2305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2305:

CGAACAGGTT GCCACTGTAA GATCTGGTGG CATTTAATGG CAATCGTATT TTATTTGGAG 60

(2) INFORMATION FOR SEQ ID NO: 2306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2306:

CTTTATAATG GCGGCGCACT TGGCATCTCT GCATTCAGTT ACACGCGGTG GCAACACAAA 60

ATTTAGGGAA TTCT 74

(2) INFORMATION FOR SEQ ID NO: 2307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2307:

TGTCCATGCA CAGCTTTATT GGAATTTACC TTTTACAGG CAACCGCTAA AGA 53

(2) INFORMATION FOR SEQ ID NO: 2308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2308:

TAAATGATTA TGGGAATATC CAAAATTATC GAGATCTAAT ATGAAGTGAC TGCACACATA 60

TCAGCTCTGA ATGAAT 76

(2) INFORMATION FOR SEQ ID NO: 2309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2309:

TCCTCAAAAT GTGAGTTAAT AGTCGAGTGG AAGCTGTGAC TTGAGCGACG ATACATCATC 60  
5 AnACTATCAA TAATGTTTGC ACATCACTTT TACTACTATC ATTTGATGTA TAAATAC 117

(2) INFORMATION FOR SEQ ID NO: 2310:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2310:

AAACTCATAT CGCTTCCGAT AACCAACCCT GCTGCTGTTG GTACAAATTG TC 52

20 (2) INFORMATION FOR SEQ ID NO: 2311:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2311:

30 AACACTGGAG TCCTAATGTC ATCAAACATC TACCTATAAG ACCTTATATA ATCGTC 56

(2) INFORMATION FOR SEQ ID NO: 2312:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2312:

GATAACATCA TAGGCCATAA CTTCCATTTA GGCCATCAGT TATAGCATGC GGACGACATA 60  
45 CTGTGCCATA TG 72

(2) INFORMATION FOR SEQ ID NO: 2313:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2313:

CATCTAATGG GAACGTGTCG ATCCTAGTCA GTATAGTCAT CGGCAGGTAC GA

52

(2) INFORMATION FOR SEQ ID NO: 2314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2314:

TAAACTGAAA TTTAATTTTC GGATGGTATT GTTATTAAGA AATAGACATA ATTTGTGCTG

60

GATA

64

(2) INFORMATION FOR SEQ ID NO: 2315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2315:

CTAGTTTAAA TTTCTTAAAC TTCTACATCA GTAAAAGGCC GCTCTGGGAC CATACAATC

59

(2) INFORMATION FOR SEQ ID NO: 2316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2316:

GCATAGTAAC TTAATTGATA GGAGATGAAA ATCCGCAAAG TCATTGGAAG GATT

54

(2) INFORMATION FOR SEQ ID NO: 2317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

GTATATGCTG GAAAGATAAA GTATGGAA~~AA~~ TGCATGGCGA ACATTTTGTA AGCAGAATGA 60  
GCTATAAGCG TTGAATGGGT TTGAACGTAA ACAATCGAAC AATGATATGT CAGACATACT 120  
5 TGCTTTAGAG CACATTTAGA GAGCGACATG 150

(2) INFORMATION FOR SEQ ID NO: 2318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2318:

AAATCATCGA TGTTAAATAA TTTAATGACA AGGATTAATG AAAGACGGAT TG 52

(2) INFORMATION FOR SEQ ID NO: 2319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2319:

TTAAGGAAAC CTTGGCCAAG GTTAAGGAAA ACCGGGGGTT CCAAGGTTTT TA 52

(2) INFORMATION FOR SEQ ID NO: 2320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2320:

ATGAAGTTGA TTTAGGATGA AAATTAATCT TGGGATATTT AATACTTTGT 50

(2) INFORMATION FOR SEQ ID NO: 2321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

CTAACGCTAA GGGCGACGGA TGGTGGTnAT GTCAAAGAGA CAAATAGGAT

50

## (2) INFORMATION FOR SEQ ID NO: 2322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 108 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2322:

CGTGGTGATT AATTTTTCGT CGCGTTTTGT TTCCTTTCCC CAGTCATGTT TTATCATTGT 60

GGGCATCATT GCACCTGGGT TCCATATTAT GACGTCATTT TTTAnAAT 108

## (2) INFORMATION FOR SEQ ID NO: 2323:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 212 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2323:

GTCACCGAAT TTCGATTTAT ATTATCACTC AATTTATTAT CTTGAAGCAC GCGTTAAATC 60

GTCTTTAAAT TGnAACAGTT GCTACTTTAT TGTCTTTACC ATTGATCTGA ATTTGATCCG 120

CTTTAAGTCC ACTATCTTTT ACAACTTGCh CTACCTTTTG TTGAGTAATT GCTTGTTTAG 180

ATTGGAAATC TACGCGTGTA CCACTTGAAA AA 212

## (2) INFORMATION FOR SEQ ID NO: 2324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2324:

TCATTTGTTT TTAATACGTT GTCAAAATTA CCAACAAATG ACAAATTAAA TTTTGCAATA 60

CATATCAAGG TGTTATTTTT TTCCTATTTT AATTATGTAT AACGCATTAA AAGTGACGTn 120

AATATTCAAA GGA 133

## (2) INFORMATION FOR SEQ ID NO: 2325:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2325:

10 ATGAACGACC GTGGACAGAC AATATTTAAA GCATTTAAAA ACAGCGTTCC CAGAAAGACA 60  
 ATATATAACC AATATTAACA AAAGCAATGC ACATTACTTC ACAAATGAAA TCAAAGCAAC 120  
 ACACATATAC AATGCAATAA GCGGGCAACA ACAAACAGAT TTCAACACGC CTGTCATACA 180  
 15 GCAATATCGT TAACAAATGA CAnCCGCCnT TTAGGC 216

(2) INFORMATION FOR SEQ ID NO: 2326:

(i) SEQUENCE CHARACTERISTICS:

20

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2326:

TGACCATATG ATTGAGGAAG GTTTTATTGA TCCTAAGTAT CGTGCTCTTG CACCGTTATG 60  
 CGACACTAAG GAATCATTAA TTGAATCAAT ATTAAATTTn AAACCTCTGG GTACTCGTTC 120  
 30 ATACGATTAA TCATTCTAAG G 141

(2) INFORMATION FOR SEQ ID NO: 2327:

(i) SEQUENCE CHARACTERISTICS:

35

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2327:

TGAAACTGCA GCGTGCCGA GTGGGGGTTG TGCCAGGTGA CCCAGATGG GCGTG 55

45

(2) INFORMATION FOR SEQ ID NO: 2328:

(i) SEQUENCE CHARACTERISTICS:

50

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

GAAGCCAGCC TAATTGGATA CCACCGGAAG TAACTTTTGA CCAGGGCCGT CGCA

54

(2) INFORMATION FOR SEQ ID NO: 2329:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2329:

GTTCCCGGGT CCAGGCCGTT GTCTTGTCGCC GGGGTGTTTG GTCCTTGATT GTGT

54

(2) INFORMATION FOR SEQ ID NO: 2330:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 190 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2330:

TATATTATAT ATTTAACTGC TGTGATGTAT TCTGAAAAAA TAGTAGTATT GCCTATAATC

60

ATCTATGCCA TTGTGTTTGT AATAATTGGT ATCACTTATA TCTTTATAGG CGACAGCTAT

120

GATCAATTAA CAAATTTCAA TGTGATTTTG TATATGGGGA GTTTGTnTTA TGCATGGATG

180

GCTATTAGAA

190

(2) INFORMATION FOR SEQ ID NO: 2331:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2331:

TTTTACCTC GTGTTTTTAA TTCAATTGAA TCTAACTAA AAGTACCTTT AAGT

54

(2) INFORMATION FOR SEQ ID NO: 2332:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 246 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2332:

TTCTAAAAAT ATTAACGAAT TATACAACTT TAAGAGTTTT TAGTATGTAA ATATTCTTTT 60  
 CATATTAATA CAATACACCC CTATATATGC TCACTTGTTT GAATTAATAA ACTTTAGCAT 120  
 TCTGCAAATA ATATTTTAAA AATAACTATA CTTTTTATTT ACCTATTGAA AAATAGTGTT 180  
 ATCATATTTA TTAAGAAGCT ATTTTATAC TAGTAGGTGT CAGTCATGAA TAACATTTTG 240  
 TTAAAT 246

(2) INFORMATION FOR SEQ ID NO: 2333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2333:

CCTTCTAACA TCTTTTTACC ACTCATTGAA ACATGTGATC CTAATAACAT AA 52

(2) INFORMATION FOR SEQ ID NO: 2334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2334:

AGAAAAGAGA CTGAAACAAC AAATTCAGGC AACTTTTGAA CAACAGAGAC ATCGATTAAT 60

(2) INFORMATION FOR SEQ ID NO: 2335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2335:

CCTCAATCAG CTCCTAAAGA ACAAATAGC GACTCGATTG ATGAGGAAAC AGTAACGAAA 60  
 AAAGAACGAA AAAGTAAAGT AACACAATTA AAGCCATTAA CACTTGAAGA AAAGCGGAAG 120  
 TTAAGACGTA AGCGACAAAA GCGAATCCAA TACAGTGTTA TTACAATnTT GGTATTGTTG 180

## (2) INFORMATION FOR SEQ ID NO: 2336:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2336:

CCTACAGTCC CAACACTGTC AGTACACTGC CGATACCCAA CCTCTGGCCG GTCCGGCA 58

## (2) INFORMATION FOR SEQ ID NO: 2337:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2337:

ATATTTTTnA TTTAATGGTT TTACTACTGC TACAACTATC ATAGGTGGCA 50

## (2) INFORMATION FOR SEQ ID NO: 2338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2338:

CTCCTGTAGA TTAAAAATCT CCTAAATAAC AAACGAATAA TCGGCCATCT TTATGTATTT 60

TGATTGCTGC AGGATTCGCT TTGTGACTTA CAAAAGGTCG TTTGATTTC TTGTTTCAG 120

GATTGATTTT GAAAATATTG CCTTCGAATA CATCCAATAA AAAGAGTTGT CCCTGCCGAT 180

CAAAGTTCAA TCCTTCTAGT TGCAATCCTT TTTTGGAAT TTCAAGCCAT GGTTCAGCTG 240

TAATTGTTTG TAATTCACCT TCAGATATAA TTGGAACAGC ACTATTGGAC TTCCCGCnAT 300

AAAATAATGG AGGGnAAAnC TGGTGGGGAC ATCCATGAGC CATTCTTTC CATTCCATTC 360

GGTTTTAACT AACCAATT 378

## (2) INFORMATION FOR SEQ ID NO: 2339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2339:

ATGAAAATAA ACTGTGTCTC CnGATGTATA CGTCCCTTCA AGCAGACTTC 50

10

(2) INFORMATION FOR SEQ ID NO: 2340:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2340:

20

TATCCATATG TGAAAAATGT CATATATGAG TCTAGTTTTG TATAAATGGA GACTCGAAC 59

(2) INFORMATION FOR SEQ ID NO: 2341:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 189 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2341:

ATTGATAAAA TATGATTAAG CGTTGTTGCA AATGACATTT TCTCAAAAAG CGCTTCACTA 60

35

TCAATTGGTA CTTGTGTGTh AATTTTCAGCC AGTCGCTTCG ATAAATATAG TTCATCTAAA 120

TTGTCATTAA TCTTATTACG TTGCCCAGCT GATAATGCAT CAATGTTTTTC AACCACATTT 180

TCAACGCTT 189

40

(2) INFORMATION FOR SEQ ID NO: 2342:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 165 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2342:

50

ATCAATTAAA ACAAAGCATA CAACAATTTG TTGATGTTGA ATCTAAATCA ATTTTAGAAC 60

AACAAATGAT TCATCAGCTT CAACAAATGG ATCGTTCTTA TG TAGAGATG ATTACAGAAT 120

55

## (2) INFORMATION FOR SEQ ID NO: 2343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2343:

CTTAACCCCC CTTTTTCCC AATTTTAATG GGGAAAAATT GTAATTAACC TGGGC

55

## (2) INFORMATION FOR SEQ ID NO: 2344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2344:

GACAAATAAA CATGACCTGG ACAAGAAGA ACAATAACA AGCCTGGCAA

50

## (2) INFORMATION FOR SEQ ID NO: 2345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2345:

GTATTGCGAT GATGCATACG GGTATTGTTT TGATTAAATA ATATTTTATA TTTAATGTTG

60

ATAAATGTTG AATAACAAT CCGCAAAGnG CACTTGATGA TAGTGCTAAG A

111

## (2) INFORMATION FOR SEQ ID NO: 2346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2346:

GCAAACAGTT TCCGTGTCCG TTTTCCAATT AAGTTAAGGA ACCCAAAGAG A

51

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2347:

TCGTAGGTGC CATAACACAC GTTACCTGGG ACTCATATGA AGTATTATGT CGAGACGACC 60

(2) INFORMATION FOR SEQ ID NO: 2348:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2348:

GTTTTTAATA GGCTCTTTAC GTATCTAAAA ATAATTGCAT TATTGGTGTG CCTTGATGTA 60

ATTGAATTAA AGTACCGTTT GGTGTGAACG TTTCAGGTAT ATCATTTTCA ACnATAAC 118

(2) INFORMATION FOR SEQ ID NO: 2349:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 176 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2349:

ATGACAGAAA GCAAAATCCC AATGTTGATA TACCGTTTTT GACACCACTT GATTATCATT 60

ATTTTTTCTT TAGCGATGGA TTTTATATTA CGATTTCAT TCTTACTATC GTTGCAATTAT 120

TGTCATTCAA ACTGTATCGT TTTTACTnTT ATAGACTTTT CGCAATAGTA ACATGG 176

(2) INFORMATION FOR SEQ ID NO: 2350:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 201 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2350:

CTACGACTGA CATTAACTGT GCAGATGTAC CTGGATTCTA TTTTTC AAG AACAAATTGT 120  
 AATAATTGAT AGTTATATGG TGCAATGTCA CCTTCATCCA TTGAGCGCTC AATAATTTCA 180  
 5 GCTGChAGAG CGGChTGACT G 201

(2) INFORMATION FOR SEQ ID NO: 2351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2351:

ATCGCTATAA CCTATCAGTG ATAATATTTG ATTGCATGGT GCACCATTTG AnATTTCCT 60  
 20 TAGAATGGTG GTACCTAATT GCTTATTTTT ATATGTCATT TGAAGATTTA AAAATTAAAA 120  
 ACTTTGATAC AGAGTGAAAC CATATTTCAA CAAATTAC 158

(2) INFORMATION FOR SEQ ID NO: 2352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2352:

TCGTAATCAA AACATTTTGA ACAGGATTAT AGTAAGGGAA TTTTGGATT TTAAC TTGTG 60  
 TTTGTTCAAT TTTTAATAAG AGTCGAGCTA AGTCTTGCAA CATCACTACT TGCTTGGCAT 120  
 CTAAC TGTTG GTCATTAAAT TTTATGAAAC GATCACTCAT GTTTTATCCC TCTTTAAAAG 180  
 40 TTTAGTTCTA CAGCATTATA TATTGCTTGT TGTTACGTT CATCTTCCAA TTTATCAATA 240  
 ATTGTACGTT TAATTGCACG TTCAACTGGC ATTACAGTGA TTAAATCACA CAAGTCTAAT 300  
 45 AATGCACGGG ATACTAGCGG CTTCTTCAGA AATTTGTCCC TGCTTAGACA TAGTACGTAA 360  
 ATCTTCATTG AAAC TThAAT AATTTGGTTC GATTTGGTTT 400

(2) INFORMATION FOR SEQ ID NO: 2353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2353:

ATTAATGGGG TTAAATAACA TTTTGACTGC GAAAGATTTA TTCTTTTCAG GTAAATCATT 60  
 5 GATAGATGTA TATAGTCAAT TTGCTGGATT AGCTGAAATG ATAAATGTnT TTGCGAATGC 120  
 ACCATTT 127

## (2) INFORMATION FOR SEQ ID NO: 2354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2354:

20 ATCTCGCTGT TTTTATGAAA GAAAACTACA TTTTCGAGAG AATAAAAAGA TTTTCTGAA 60  
 ATTTAATCTA TCAATTACAT TGATTTACTA ATATAATTAG AAAGTAAATT TTATTTGATC 120  
 AAAGTAAATG GGGGAAGTAC TGTGATAGAA AATAAGAAAA CAGTTGAAGA TACATATTCA 180  
 25 ACAGGCGCAA TTGTTGATTC AATATCATCT TCAGTnCAAA TGn 223

## (2) INFORMATION FOR SEQ ID NO: 2355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2355:

40 ACACTTGTTT AAACACTCAC AATGATAAAG CATATTATCA GTATTGTAGT GTGTGGAAAA 60  
 TGACAGCCAT CTAAGGAGAA AAATGATGAA AAGAATATTG GTAGTATTTT TAATGTTAGC 120  
 AATTATATTG GCAGGTTGTT CTAATAAAGG TGAAAAGTAT CAAAAAGATA TTGATAAAGT 180  
 45 GTACAAAGAA CAGAATCAAA TGAATAAAAT TGCCTCGAAA GTACAAAACA CTATTAAAC 240  
 AGACATTAAA CAAGAAGACA GTAATACACA TGTTTATAAA GATGGTAAAG TCATTGTTAT 300  
 TGGTATTCAA TTATATAAAG nTCGTGAAAA AATGTATTTA TTTCGCATAT GAA nTAAAG 360  
 50 GTGGTTAAGG CCAGAGGATT TAATCAGnGG AAAnTAGACC 400

## (2) INFORMATION FOR SEQ ID NO: 2356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2356:

AATTTACTTT GTGCCACAAG GTTATCAATG TCTTTTGAAC CACCAAACAT TCTAGCGATT	60
AAGTGACCTC CATCATCGTC TGGTAATCTA TCCTCTCCCC CCACAGTTCT TTGTGCATGG	120
CTATTACGAT CCCCATCTTT TAGAGAGAGA TTGTCTACAT AAACCTCTTT TATGCGACCT	180
TTATGATCGG TTCGATATAT GTGACCAGTA GGTGTTGTGT ATTCAATATT CGCCTTTAGT	240
TTCTTAGGTh CTAAGTCTTG GCATAGTGTT CTCCGAATTC nAACCTTGGT GTTAGTTTGG	300
TGATTCAACA TACTTTTGAT GGAATTCATT ThCATGGGCT ACTT	344

(2) INFORMATION FOR SEQ ID NO: 2357:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2357:

TATGCGCCCC TGCTTGATCT TTCATTTGCG TCCACTCAAT TAGTTGTTTG CGC	53
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(2) INFORMATION FOR SEQ ID NO: 2358:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2358:

ATTTTTTCAC CTTCTGAAAT TGATAAATCT AGGTTATCGA ATATAGTCTT ATCGGCATAA	60
GATTTATTTA AATGTTCAAT TTTATATGCT TCCATACCCA TCTTCCTTCT TCTGTTGAAA	120
TCTCTACGTA CTAAATCAG TTCTATACAT TATACACCTT TTTGAAATCA AAAGAAATCG	180
ATACCGTTAA GTGTCATAAT TTAATATATT GTTGCTTCAA CTATAAATAA AACTTGTTAA	240
GGCTTTGATG ACTATGCTAA TGATCTTTAT AATATACCTT TTTATCAACA CATATAATGT	300
AAAACATAAT ATAnAAGAAC ATAATAAAAA CCCGGATTGA TATTTTATCA ATCCGAGTTC	360
GTGTTTAGAT ATTATTTTTT AGAGTTTGCT TTAGGTCCTG	400

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2359:

TTAATGTCGC CATT TTTTGT TAGGTAGACG TATAAATCTG GACCTTTTGA TGATTTGTAG 60  
 TTAGTAAGCA TTAATTTACC ATTTTAAATC TCAGCTTTAC CTTCAACAGT TTCACCGTTT 120  
 TTAGAACTGA nTG TACCTGT TAGGTGTTTT GTTT 154

(2) INFORMATION FOR SEQ ID NO: 2360:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2360:

ATATGTCTTG TGATTTTTC A GGTGTAAGTT AGTATGCAAG TGATTATGAT TGATAGT 57

(2) INFORMATION FOR SEQ ID NO: 2361:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2361:

GGCATCAAAT TAGTAGCGAC TCACACGTGA TGCATCCTGT GTTTTGGATC TCATTCT 58

(2) INFORMATION FOR SEQ ID NO: 2362:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2362:

TGTTATTATC GnAGAGGCTT TTCGCTTTGG AATAAGGTAT TACGTGAATG 50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2363:

CTCTTCTGGT CCCTGACATA CATAGGAGAA ATAGCnCCAT GTACAACGTG

50

(2) INFORMATION FOR SEQ ID NO: 2364:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2364:

ATTGCCAATG TCGTTAGTTC GTGAGGCTGT TGGTGAAAGT TGTGTTTGAA

50

(2) INFORMATION FOR SEQ ID NO: 2365:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2365:

CCATGATTTA AATCATTGAT TAATGGTGCT TGTTCCTACAT CTGTGTAAAA TTCATACAAT

60

TCTTTAGCAT CGTCGAATAG TTCATCACGA CGTTGGnTAA ATTCTTCTTC T

111

(2) INFORMATION FOR SEQ ID NO: 2366:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2366:

TAATGCTGAG CGTGTTACTT TAGTTGGATC AACGATACCT TCTTCTAACA TATTAACCCA

60

CTCnTTTGTA GCAGCGTTAA AACCAACACC CGGCTCTGCG TTTTCAAAC GTTCTACAAT

120



## (2) INFORMATION FOR SEQ ID NO: 2367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2367:

CCTGATTGCA AAGTACAGCA AGCACTACAG ACGCCTAAnC ACTnACACTA

50

## (2) INFORMATION FOR SEQ ID NO: 2368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2368:

AAAATGGTAT TGCAATTAGT AATGTTACAA CAAGTGTGT AATAGCTGCA TAAAT

55

## (2) INFORMATION FOR SEQ ID NO: 2369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2369:

TATAGGATGA AAATCCTGCC AAAAGATTAA GGGGTGGCCT AATGAACCAT G

51

## (2) INFORMATION FOR SEQ ID NO: 2370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2370:

TTGCTCGAGG TGGTAAATAC GCAAAGTTTA TTTGGTTGTG CTAAGAGAGA AA

52

## (2) INFORMATION FOR SEQ ID NO: 2371:

(A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2371:

10 TAATTTGAAT AAGGTGGAAG TGATAAACAG TGCTTTGCGA ATCTAGAGTC ATTAATCAAA 60  
 ACCCTA 66

(2) INFORMATION FOR SEQ ID NO: 2372:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2372:

25 AGACAGGTAC TGTCTACGG TATGGAGCAG AAGCGGGAAA GCTGCCCGA GCCAACTGTA 60  
 GACAA 65

(2) INFORMATION FOR SEQ ID NO: 2373:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2373:

40 TTGCAGTGAC GGCTTATAAT CATTCCAAGC GAACAATTAG ACATTCCATA TAAAATATAC 60  
 AGATGGCTTT CAGTAGAGTA GTGGATTCCG ATTACGAAAC TATACTGGAA GCTTTTTATT 120  
 ATAAATGAAG AGAAGTTATA TTTTAGCAT GTATAGTTGA ATACTGGGTT AAAATACCAT 180  
 45 ATTAATAATG AAGTAAAGGT ATGAGTGATT ATGAAAGTGT TTTGAATGAA ATATATTTAA 240  
 TTGGTGATGC TTTAATTGA AAAGATTAAC AGGATTCAAC TTGGTAAATT GTATTAAATG 300  
 TGAGAAAATA AAAGTATATT CATTGAGAGA TATATGAGTC AATGATCGTT TTAAACAAGA 360  
 50 TAAGTGATT TTAATATGTA AAAGTTATGT AATAAATATT 400

(2) INFORMATION FOR SEQ ID NO: 2374:

55

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2374:

CCTATCATGC CTCTCTCTCA CTGAATCCTT TAGATCCCCT TCCCTCCCTC TCCCCCTCT 60

10 TTTCCCTCC 70

(2) INFORMATION FOR SEQ ID NO: 2375:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2375:

CCAAGTCAGA GCAGCAGTTC AGTTCGTCAG CnGTTcAGTT CAGAGCnGTC 50

25

(2) INFORMATION FOR SEQ ID NO: 2376:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2376:

35

GTTGGTGAAG CTGTTGCCGA nGGAGAAGCG GGTATGGATC CTGACGGTGn 50

(2) INFORMATION FOR SEQ ID NO: 2377:

(i) SEQUENCE CHARACTERISTICS:

40

(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2377:

AATTGCAGGA CAGGTCAAAG GCAAATGCAC GTATTCAGGT CATGCTCATG TGCATGTTG 59

50

(2) INFORMATION FOR SEQ ID NO: 2378:

(i) SEQUENCE CHARACTERISTICS:

55

(A) LENGTH: 229 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2378:

5 TTTATCATCG TATAAATCTA TATCTAATTG ATTAAACTTC GGGTGCTTAA CTAACCTCTCT 60  
 CAATACACTT ACACCAGCAG TTCCCATGCC TATTATTGCT ACACGCATAT ATCATCCATC 120  
 CTTTTGTAAT TCAAAATATT ATATTTAAAC TATTACCTAT AATTATAGCA ATTTGGTATT 180  
 10 TCCAATAAAA TTTATnAAGG TAAGCnATTA TTTCACTTTC ACAACCATT 229

(2) INFORMATION FOR SEQ ID NO: 2379:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2379:

AGTTTTTTGT TTGACGTATT TAATTTACTA TTTGCTTGAT TGATATTTTT AGACATTAAA 60  
 25 TAGTGTCTC CTAATCAATT TATTCTTCTT TATnTCAGCA TTATTCGCAC TGACAT 116

(2) INFORMATION FOR SEQ ID NO: 2380:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2380:

CAAATCTTAG CGGATGATTG GCATGTATAT TCTGCTGGTA TCGAAnCACG CGGTGTTAAT 60  
 40 CCCAAAGCGA TAGAAGCTAT GAACAGAAGT CGGCGTTGAT ATGTCGAATC GTACGTCAGA 120  
 TTTAATCGAT AATAAT 136

(2) INFORMATION FOR SEQ ID NO: 2381:

45 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2381:

55

TTAATTGATA GCTTTTATCT GTAGGAAAAG CTATTTTAAA GATTTCTAGT GTATCTATAA 120  
 CTTTTTTGGG ACGATATTGA ATATTACAAAT CTTTAAATGC CTTTTTAATA AAATTCAAAT 180  
 5 CAAAATCTAC ATTATGAGCT ACAAAAATGC AATCTTTTAT CTTATCGTAG ATTTCTTGTTG 240  
 CAACTTGATT AAAATATGGC GCTTGTTGTA GCATATTTTC TTCAATGGAT GTTAACGCTT 300  
 GAATGAACGG CGGAATCTCT AAATTTGTTC TAATCATAGA ATGATATGTA TCAATAATTT 360  
 10 GGTTATTGCG CACAAACGTT ATACCAATTT GAATGATATC 400

(2) INFORMATION FOR SEQ ID NO: 2382:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2382:

TATTTTGTTA ATAAAGTTAA TATATGTTTG TTGTACAGAT AGTTCAGGAT ACA 53

(2) INFORMATION FOR SEQ ID NO: 2383:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2383:

CCCGAGCTTG CCCTCCTTCC CCCCTCTTCG CCTCCAGACG AAGTGCCCTT CTGTCCTTG 59

(2) INFORMATION FOR SEQ ID NO: 2384:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2384:

AGCCAACATC CCnGATGGTA CTTGCATTAA TGCATAACCT AGAGAGAAGA ATGATGCCAA 60

TAAACCAAAT TGTGGTTTTG TCATCCCTAA ATCATCCATC ATTTGCTTAG 110

(2) INFORMATION FOR SEQ ID NO: 2385:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2385:

10 TGAAAGTTCT TTTAnGCATC AATTTTAAnA CTACGAGCGG AChCTAATAT 50

(2) INFORMATION FOR SEQ ID NO: 2386:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2386:

GGCAATTTAT TGACACAATG CTTGAGChAT TGATAGCAGG ACAAGAAAGA ATACTTGATG 60  
 25 AGTTAATACC AAAAATGGAT GCGACTGAAA AATTAACGCT TTATTTAACT AGTCATTATA 120  
 AACAGATAGA TTATGAATTT TTGTATCTCC TTTCAATGGA TAAATTGTTT GGAAATAAAAA 180  
 GAAATAGATT AACATTAATT GATTTAGAAA ACATATTGGG AGTAGGAAGA GTAAAAATTA 240  
 30 GTnGT 245

(2) INFORMATION FOR SEQ ID NO: 2387:

(i) SEQUENCE CHARACTERISTICS:

35

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2387:

CACAAAATTC GAAATCGTCA TCGGTGATAT GTTTAATACT TGGGAAAATA TAAAACGCGC 60  
 45 CTTCAGGTTG AGCGGTAATC TCAAAACCTA ATTTAGTTAA TTCAGATACT AAATAATTC 120  
 TTCGTTChAC ATAAGCTTCG 140

(2) INFORMATION FOR SEQ ID NO: 2388:

50

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

TGGATAATTG AACA

134

## (2) INFORMATION FOR SEQ ID NO: 2825:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2825:

CCAGAATGAT GAGCTACAGG ATCAGCCCAG ATATGCAGGT AAACGGGCCA ACCATTG

57

## (2) INFORMATION FOR SEQ ID NO: 2826:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2826:

CAATAATGCT GAACAGCAAC GCATCTCATT CTAAAATCGC TCAGAATCAC ATCCCATGCA

60

CACATAATAA GTGGCACTTA GCTTAAAT

89

## (2) INFORMATION FOR SEQ ID NO: 2827:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 64 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2827:

CGGATTAGTG GTGTAACTG GGTGACCCAT ACCACACCTC GCGTGTTGTG AAAAAAGGAC

60

TTAA

64

## (2) INFORMATION FOR SEQ ID NO: 2828:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2821:

CAGTAGTACG TAAAAATGAA TCACTTGAAG ATGCGTACGT AGATTTTAAA CGTCAGTTCT 60  
AAAAAGTGGA CAATCCAAGA GACGTAACGG AATTTnCGAA AA 102

(2) INFORMATION FOR SEQ ID NO: 2822:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2822:

GAGTACTTAA TCCGGCACCG TTTACTTCTG GGGGCATCGA CTAAGTGGGG CGGCC 55

(2) INFORMATION FOR SEQ ID NO: 2823:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 71 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2823:

ATTGGTTTCT CATAAACT TTTCTATGAA TTTGTATGTA TTTGTTTATT AAAATCTCTA 60  
ATTCTTATGG A 71

(2) INFORMATION FOR SEQ ID NO: 2824:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 134 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2824:

CCATTGAGTG TGAGTATATC ATCGATCAAT ATGCAACATT TATCAGGTGC ATGTTGCTTA 60



TCTGAATGAC GCCGAAATCC CATCTGAATT CATGGGATTT TCCACTTTCA

50

(2) INFORMATION FOR SEQ ID NO: 2817:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 51 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2817:

CGTTACTAAA GCTACATAGT GCGTCATTTA AGATTATAGC AAGTAGCATA T

51

(2) INFORMATION FOR SEQ ID NO: 2818:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2818:

CATTCACCAT AATATTCATT GTTCCATTAG CATATCAGGC ATGTCACGTG CACA

54

(2) INFORMATION FOR SEQ ID NO: 2819:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2819:

GTGTATCAAA TGAGCATGTT nCAATGGTTC AnCATGGCGT TTATGGCACT

50

(2) INFORMATION FOR SEQ ID NO: 2820:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2820:

ACAATTGCGG CTGCTCATTG TGAGCACGAC TTTATCATGG TTGGGTTTCAG

50

CATCATTAAAG GCAAAAACTT TCACAAAGTC ATGAGGCGCA AAAGGTATTA TTATAACACA 60  
TCCCGCGTTG GG 72

5 (2) INFORMATION FOR SEQ ID NO: 2813:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2813:

CCATTTAAAG CGGTACGGGG CTTGGTTCAG GAACGTCGTT AGACAAATTC GGT 53

(2) INFORMATION FOR SEQ ID NO: 2814:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
25     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2814:

30 TAGTACCCAA TTTCCAGTCG AACCAGGATG GGACCAGAAG CCAAACCAAC GTT 53

(2) INFORMATION FOR SEQ ID NO: 2815:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 62 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2815:

GAAAAAAAGG CCTTGTTTAC CAAAGGGGCC AATTTTTTCG GTTCAAGGTC CAAACCTACC 60

TT 62

45 (2) INFORMATION FOR SEQ ID NO: 2816:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
50     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2808:

ACAAAGCAGT ACTGAACTGG TTTCGTGGA GCCCGTGTG CTGTTTATTC ACGGCA 56

5 (2) INFORMATION FOR SEQ ID NO: 2809:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 63 base pairs

(B) TYPE: nucleic acid

10 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2809:

AGGGGGCGTA CAACATAGAT TTGCGAGATA CTCAGCATT CACTTCCATT TAACTTATTA 60

TCC 63

20 (2) INFORMATION FOR SEQ ID NO: 2810:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 58 base pairs

(B) TYPE: nucleic acid

25 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2810:

30 TTAGGCGCCT GTTCCAACCG CACCCATATA AGGCGGTCGG CTGCACGCAC GACGTATG 58

(2) INFORMATION FOR SEQ ID NO: 2811:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 58 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2811:

AAACCCCAA GGAATTAATT TTCCGGTTTT CCAACCCCTT AAAAAGGGAA AGGCCAAT 58

45 (2) INFORMATION FOR SEQ ID NO: 2812:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 72 base pairs

(B) TYPE: nucleic acid

50 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

CTATTG

126

## (2) INFORMATION FOR SEQ ID NO: 2805:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2805:

AAAAGCGCAT ATGGTGT TTT TCTCATATCA CTCCAGGACT CAGCAGCTGG AAGGAGTTAA 60  
GAAGTAATAA GGTGCCACCC TAAATCCA 88

## (2) INFORMATION FOR SEQ ID NO: 2806:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2806:

TGGATCCGGT ACCAAATAGG GACTACCGGG AATGTCCCGG GGGGCCTAAT GCCGAATGGG 60  
GCAACG 66

## (2) INFORMATION FOR SEQ ID NO: 2807:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2807:

CCCGCTAACG TGGGGAAAGT TTTGAAGTTA AGAAGGAATG GATTCCTAAC GGGGCGGGGT 60  
CCAAAC 66

## (2) INFORMATION FOR SEQ ID NO: 2808:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

CCAATTCAGA CTGTTATTCT CTCTTCGTGA TAACCCGTGA TGTTTGTCTG C

51

## (2) INFORMATION FOR SEQ ID NO: 2801:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2801:

GGGGGnGCAT ACCGCACCGA AGCATCAGAC GATGTGAGCG ACCTACCTCC

50

## (2) INFORMATION FOR SEQ ID NO: 2802:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2802:

CCGTAGCGCA CATATGACGA GACCAAGGAT AACGTGCAAn GnCATATTGT

50

## (2) INFORMATION FOR SEQ ID NO: 2803:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2803:

CACGTCATGA ACGTGCAATC AACACAATCA TTTACGAGAT GGACCAAGAC

50

## (2) INFORMATION FOR SEQ ID NO: 2804:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 126 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2804:

TATGGTGT TT ATTTAGCGC TnGTTGTGCT TTGTCTTCAG CATCTATAAC CTAGTGCGAT

60

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2796:

TATACGCCTC ATTACACCCA ATTGGACCCT TTACGTATGG AGTACATTAT AGAATCGA

58

(2) INFORMATION FOR SEQ ID NO: 2797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2797:

nGCTAAGAAT TTATAAGAGG TTTCGGCAGA TATATATACG CAAGTATCTG

50

(2) INFORMATION FOR SEQ ID NO: 2798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2798:

AAGCAGTCTT TCACAAAAAG TGAATAATCA CTAGTTCATT AATTTGCATT TGAACCTTCA

60

TATAATGCAT ATTACTTAAT GTACAAGCAA AGATGTATTT ACCTATCAAA GAATTTnC

118

(2) INFORMATION FOR SEQ ID NO: 2799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2799:

CCATAGAACC TGTGAATACC TATACATATC ATACTGTGGA ATTCGTTACG AGG

53

(2) INFORMATION FOR SEQ ID NO: 2800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ATTCCTATTC AACAAACGGAT ACATAATCTT TTATATCTTC CTTCTAGTCA TATGATACTG 60  
GAATAAGTGA TATTTCTTAT AAT 83

5 (2) INFORMATION FOR SEQ ID NO: 2793:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 64 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2793:

CATATGTCAT CGTACGTAAT CATCGATGAA ATATCAACAT CTCGACTTAA TAGGTCAACA 60  
AGAT 64

20 (2) INFORMATION FOR SEQ ID NO: 2794:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 57 base pairs  
    (B) TYPE: nucleic acid  
25     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2794:

30 CCCTACTCCG CGCAATAACC GCATTACCAG ATGCGCTTCC ACTGAGGAAC GACGGAT 57

(2) INFORMATION FOR SEQ ID NO: 2795:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 65 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2795:

AGATAAAGTG TCATCTATAT CCATCTATCA ATATAGATAT GTTTACGGCC GATTTCAATC 60  
45 CGCAA 65

(2) INFORMATION FOR SEQ ID NO: 2796:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 58 base pairs  
50     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

55

GCATCATGGA ATATTAAAAC AGCTGATATG TTTGAGTAAT GATTGATTGA CGAGATATGC 60  
GGCA 64

5 (2) INFORMATION FOR SEQ ID NO: 2789:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2789:

TGAGAGAAGT CACAGTCGCC AGCGGCAAAG AACCCGnnAA GATGTGnGCA 50

(2) INFORMATION FOR SEQ ID NO: 2790:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 64 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
25     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2790:

30 CAGTGTATGG AATCTTGTTT GAGTGTGAGA GTCAAAGACT TGGTGATTGA ATGGAAAAAT 60  
TGAA 64

(2) INFORMATION FOR SEQ ID NO: 2791:

- 35 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
40     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2791:

45 ACAAnGGGTG AAGTTCTCCC ACATGCTGTA TACCGTGGA TTATTTTAA 50

(2) INFORMATION FOR SEQ ID NO: 2792:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 83 base pairs  
50     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2784:

GCCnChCTCT GTGACACTGT GTATATACAC CCGCGGGAAT ATCTCCAACG

50

(2) INFORMATION FOR SEQ ID NO: 2785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2785:

CTTTGTCTGA CATATTGGGG CAGTGATTTT TGGGACGGTT CTACATGTCG AGTACTTTAG

60

TCAGAGTTGT GAGTAGCGGA CGGGTnTACT TGATATACCC TTAATGTGTA T

111

(2) INFORMATION FOR SEQ ID NO: 2786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2786:

CATGATGATA CTTGCATGTA CGTTGTACGT GAACGTACAG TTACGTTGTC

50

(2) INFORMATION FOR SEQ ID NO: 2787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2787:

TCAGCAAGTA GTAAGGATAT CAAACTATGA TCTATTTGAT GTTATGCCAT AA

52

(2) INFORMATION FOR SEQ ID NO: 2788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

AGCCTGGGCT AGGACCCAGA TCTTTCCCAT TTCCCTGTTC CAAAAATTTT nGGCACAGGG 360  
TGGCCACCCT G 371

(2) INFORMATION FOR SEQ ID NO: 2781:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 133 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2781:

GGGGTTGCCA AAGGGGTGTT AAATTTAAGT CCGATGAAAA TTAAGnAAAA AAATCCCATT 60  
TTCCCTTCCG GGTCCGTTGT TGGGGCCTTA ATTTCCCGCC AATCCAAGTT TGGTGAATGA 120  
AATTAATTAC CGT 133

(2) INFORMATION FOR SEQ ID NO: 2782:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2782:

GTTCAAGTTG ACGCTGGATC ATCTGGTACA CACGTATCCT GCATACTATA GATGTCAT 58

(2) INFORMATION FOR SEQ ID NO: 2783:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2783:

GCTAATTATA GGCCGTCAGG CATTACGnGA TCGAATCTGG CAACTCACAA 50

(2) INFORMATION FOR SEQ ID NO: 2784:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2777:

5 AACGACCCCG GGTTCACCG GGGTCCATTA AGCCAAGGGC CAGGGGACCC C 51

## (2) INFORMATION FOR SEQ ID NO: 2778:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 124 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2778:

15 TTGTTCCGGC CTAAAAAATT TAAATTGAAC CCAAGGGTTG CCTTGGGTTG GGTAATCCAT 60

20 TTTTGAATA AACCTTTGnC CCTAATGAAT TTTTCCGCCA TTAAAGGGT GTCCGCCAAT 120

CCGG 124

## (2) INFORMATION FOR SEQ ID NO: 2779:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2779:

30 GTAAATTTGG GAATTACCGG AAAATTAAGG AAAGGCCAGT AAGGGGTTTC CAGGCCAA 58

## (2) INFORMATION FOR SEQ ID NO: 2780:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 371 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2780:

45 GCACTCCAGC CTGAGCACCA GGGTGAGACC CTGTCTCAAG AACAAAAACA nCAACnCAA 60

AAAAC TTGTT CAAAAC TAC TTCCTGCAGT AATCTTTCCT TGAACAAACT CACCCTCTAA 120

50 TTCCACCTG CAATTGTGTG TAGAAATCCA TTCTCGTGTG TAATTTTGGG CTTATATGCA 180

CACATTGAAA ATCCAAGAGC CAGAAAGAGC TCTAAGGAAT TATCCAGTCC AGCTCTGTGC 240

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2773:

5 AACATTGTAT TCGTGATTAA GACTTCGATC GGTTTCAGTAT TCGGCAGATC CACATGTGAC 60  
CATGCTT 67

(2) INFORMATION FOR SEQ ID NO: 2774:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2774:

CACCCTTGTG ATATCACATT TGTATGTGTT AAGAGGGAGC CCCTTTCCCG ATCAACTGGC 60  
20 GATAAAAACA GTTGANAAGT GGGCGGGGGT TATTATTTCT GATGACGGCG GGGTTTTTTC 120

(2) INFORMATION FOR SEQ ID NO: 2775:

25 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2775:

AACCGTTGCA GGTnAAGCTG GGCnCACCAT TCTTCTCTAT TAATGGTTCA 50

35 (2) INFORMATION FOR SEQ ID NO: 2776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2776:

CATGTACGGT GTCCACACAA GAAGTATTTA GGTGGTTGTT CCCGGATTTA ACCTGGC 57

(2) INFORMATION FOR SEQ ID NO: 2777:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2769:

CTTAGGTAGC TCAGTGTGTT ATTGAGAGGC CTGTTGGCAG GCCCCGGACG ATC

53

(2) INFORMATION FOR SEQ ID NO: 2770:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 69 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2770:

AAATTGATAG CGTGCACAAA CCAGGTCCAT CCACGAACAT GCCAATCCAG CCCAGGAAGT

60

AATTGCCCCG

69

(2) INFORMATION FOR SEQ ID NO: 2771:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 52 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2771:

ACGATCATCT GGATGGATAT ACAGAACAGT GTGATTGTAC GTGGTGGGGA AA

52

(2) INFORMATION FOR SEQ ID NO: 2772:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 70 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2772:

TTAACAGTAT GATATTATCA CACGTGAATA GGATATGCCA AACTGGCAT CGTTGGGGAT

60

AGCGTAATAC

70

(2) INFORMATION FOR SEQ ID NO: 2773:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 67 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2765:

ATATATTCGT ATGCACCTTT TGTAAGGCTT TGTAATACGA AAATTATCAC TACAATGATT 60  
 5 GCTGTAACGA GTAACGACAT ATATGGCACA CCGTTTTTAT TnGTTTTACC AA 112

(2) INFORMATION FOR SEQ ID NO: 2766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2766:

TATTGAAGAT TTTTTCGAAG ATAAAGGTGA CACATATTCA TGTCATGTTT AATATCGTTA 60  
 20 CCTTACGTAA CCATATAAGA CTGTAAGTTG TGTCATATCA TTCGTAGAAC nTTTGGAAT 120  
 GAT 123

(2) INFORMATION FOR SEQ ID NO: 2767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2767:

GTCCGCGCCA CGGAATGGCC CACGGGACGA TAAGTGAGGG CACCGACGGC CGAACCCAAG 60

(2) INFORMATION FOR SEQ ID NO: 2768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2768:

GTACGCGGAG CACGAATTCC GCGGATCTGG GAGCATCTCT AGGTAA<sub>n</sub>TTT 50

(2) INFORMATION FOR SEQ ID NO: 2769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

ACACTATTGT GCCAGCGCAC CTTCGAGGTA TCTTGCATCA CTCAGCTGTT TTTTACTGT

59

(2) INFORMATION FOR SEQ ID NO: 2762:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 68 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2762:

TTATCCTGTT CCTAAGCCCG ACGGCTCGGC CACACGATTA ACCTTTAACG CCATCTTGTC

60

CAACCTGT

68

(2) INFORMATION FOR SEQ ID NO: 2763:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2763:

TGGAAAGTAC CATATAAGTA ATGCTAGTCG TTTCAGAAAG ATATAAATCG TTGGGAAAAG

60

AAGAAATGAC AATTATAATGT AAATATTTGT TCATGTACAA ATAAATATAA TTTATA

116

(2) INFORMATION FOR SEQ ID NO: 2764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2764:

TTGTTACAGT GGTGTAGCGG ATCGCACGGC CTTCAACTAA GTGGTTCAAT GCTTGATACC

60

AGTTATGAGT GTTGGTGC

78

(2) INFORMATION FOR SEQ ID NO: 2765:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2758:

ACACGGCAGC GAATACTCGT TTGGTGAGCC TGTACACATC TAACACGAGA A 51

(2) INFORMATION FOR SEQ ID NO: 2759:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2759:

GGGAAAACCA ATTAAGGATT TAAAGGTTnA TTAAAGGGG CCGCCACCGG GTTGGGGATG 60

CCCTTTGGGC ACCTTAAGAA AGCCCCGATG GAAAGGGACC GGTTACCTTA ACCGG 115

(2) INFORMATION FOR SEQ ID NO: 2760:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2760:

TTTGGCCAGG CCAATTAATT CCTGGTGGCC AATTAAATTT AAGGGGACCT TTGGGGGAAT 60

AAGGTTTAAA ATTGGAAAAT GGTCCAATTT GGACCTTTTG GCCAATTGGA TTCCCGGCTT 120

AAAAAGATTT GGACCGGTAA ATCCCTTTTT AAATTACCTC GGGCCAnGGC CCAACCAAGC 180

CAAACCAATT TAAATCCGCC TGGAAACCAA CCCATAnTTC CTTTACC 227

(2) INFORMATION FOR SEQ ID NO: 2761:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (2) INFORMATION FOR SEQ ID NO: 2754:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2754:

ACAAAGGTTT TACGCCCAA TTGTTCACTG GCTAACTGGG CGATGGTTAG TATTGGCAGC 60  
GCAAAAGTGG CAGGGG 76

## (2) INFORMATION FOR SEQ ID NO: 2755:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2755:

ACCTCAGGGA CAATTAAAAG TTTTCTTCG GAATGAATGA CAACAACAAA T 51

## (2) INFORMATION FOR SEQ ID NO: 2756:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2756:

ACGTATTCCC TCGTTCTTAG GTCTTCTAAA CATAGGTGAC TTTTGGTCG 50

## (2) INFORMATION FOR SEQ ID NO: 2757:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2757:

AAATGCTTCG TATTAACGCC TATTTTAGCT CCGTTATAGA CACAACCTAC ACA 53

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2750:

TATTTAGATT CAAAGCATCA AATTGGTTTC GTACCCTTTT GCACATCGGT TGGGATAA 58

## (2) INFORMATION FOR SEQ ID NO: 2751:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2751:

GGAAAACCCC CCAAATTTTC CCCCCCGTT GGGAAAAGAG TTCCCAAAGT TGGAATTAGT 60

TCCCAAACCC GGGAGTTCC 79

## (2) INFORMATION FOR SEQ ID NO: 2752:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2752:

AGAACCGAGA GATAGTGCCG AGAGAGCGAG AGGTTTTAAT AGAGATGTTT GGCCGTACTA 60

GTTAGCCG 68

## (2) INFORMATION FOR SEQ ID NO: 2753:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2753:

ATAATCTATG GGGGGACCGT CTGGTAAGGA ACCTGGTTGC CCTGCCAATG AAGCCACCCT 60

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 55 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2746:

TAATTTGGTC ATAATGTTGT TTCAGATGAA ATGCTAACAA TACTTGATT ACAGT 55

(2) INFORMATION FOR SEQ ID NO: 2747:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 64 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2747:

ATGGTGGAAT GGGATTTAGG TGGATGGCCC CCCCAACCAG CCGGTCCTTT TTAAGGAACT 60

TTGT. 64

(2) INFORMATION FOR SEQ ID NO: 2748:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 78 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2748:

AACAAGAGTT ACATTGGTTG TGGAAATCAT CGGTTTTAAT TAGTCCAAAA GGATGGATTC 60

AATCGGTAGG GGGGTAAG 78

(2) INFORMATION FOR SEQ ID NO: 2749:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2749:

GCAAGTGGCG GAGTCACACT TATAGACAAG AAGTACGACA TCTTGTATGT GGTG 54

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2742:

TGAAGAAATC GCACACACTA TCGAACGCAG ATCGCACATC GAATGCATCA GAATCAGCTC 60

(2) INFORMATION FOR SEQ ID NO: 2743:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2743:

TATCACCTCT TTTGCATATT ATTAGAATAT ATAATGATCT TTATAGAAAG GAAAGAAGAA 60

GAGTTATCAT nGCGATATCG CCCAGCGCGT CGTACACTAT GCCATGAATT ACACAATCAT 120

GCCTC 125

(2) INFORMATION FOR SEQ ID NO: 2744:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2744:

GAATTTCCCC CGAAACCGGG AAAAATTTTT CCCAACCGGT GGCCTTCCCC CGTTCCCGT 59

(2) INFORMATION FOR SEQ ID NO: 2745:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2745:

TTTTCTTAA GTTAGTTTTT TTATTGGGCC AAAACCGGCC CCAGGAATTG A 51

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2738:

TAAATTTAAA CCCGTCCCGG TTTCCCAAAT TTGGAATTTT TTGGAACCCC TGT 53

(2) INFORMATION FOR SEQ ID NO: 2739:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 85 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2739:

ATACCCACCT TGGATTCTTA ATACCCCAAA AAGGCCGGGG CAACTTGGCT TAAAAAACTG 60

GCTTGTTTAA ATTGGATTTC CGGCT 85

(2) INFORMATION FOR SEQ ID NO: 2740:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 70 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2740:

GGAAAGTTTA GTAGTTTAGA GTCGAAAAAT TAGTTTTCTA GTGTAACGAA TCCGGACCCA 60

AATTTTTTTC 70

(2) INFORMATION FOR SEQ ID NO: 2741:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2741:

CGCGCCAATT TACCTGGCGC AGCAGACGCT CAACGAGGAG CACGGCAGCT GCG 53

## (2) INFORMATION FOR SEQ ID NO: 2734:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2734:

CCAGGCTGGC AGTTTTTCTA AAATGGTGGT AGGAAAATTA nCCAAACCAT TTAGGATGGC 60  
ATGGTCTTCC ACGGATGGCG GCCGTTAACC CCAAAAAAGG CCATTCCATT T 111

## (2) INFORMATION FOR SEQ ID NO: 2735:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2735:

CGTATGGGAT GGCCATTCTG ATGACACACA ACGGTTAGGT TAGCAACGTT GTCAAA 56

## (2) INFORMATION FOR SEQ ID NO: 2736:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2736:

CAATCCGGGT GTGCGGGCGT GTGTACAAGA CCCGGGACGA TTACCGACAT 50

## (2) INFORMATION FOR SEQ ID NO: 2737:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2737:

TAACATTTAT TGTGGAGAAA GTnAGGTATC GTGGTAGTGA GGATTGTGTT 50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2730:

TGTTTGGGGA CCTTAAATGG TTCCAAATTC CAACCACCCA CAAAAGAAT TCCAGTTTCC 60  
 AATTAGCCA GCCA 74

(2) INFORMATION FOR SEQ ID NO: 2731:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2731:

AAGTTGGGGA TTAAGGCCAG TTATGGAAAG GATGGATGGT CCATTGGGC TTATTAGAAG 60  
 AGCATT 66

(2) INFORMATION FOR SEQ ID NO: 2732:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2732:

TTTGnAAAAG CCnGTAAGAG TATTTGATTT TGTGGAGGC CAAACCAGAA 50

(2) INFORMATION FOR SEQ ID NO: 2733:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2733:

AGTACCAGCG GACAATTCGG ACCCAACTTG GCAATTTGnG GTTTTGGACC AGGAAATAAA 60

## (2) INFORMATION FOR SEQ ID NO: 2726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2726:

TTTAGGCCCT GTAACnGnTT GCCGnTTGGn CCGTGTGTAT ATCGGGGGAA 50

## (2) INFORMATION FOR SEQ ID NO: 2727:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2727:

GGATCATTAAC ACGTGTATCA CCATCCAGTT TGCAAGACGG ATAAACTGCT GCAACG 56

## (2) INFORMATION FOR SEQ ID NO: 2728:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2728:

ACCCATGGAG AATTAAATTT AAAAACCGTA TTCCGGGTGG ATGCTGGGTG GGTAAGTTGG 60

CCATACTGGG 70

## (2) INFORMATION FOR SEQ ID NO: 2729:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2729:

ACCACCTTCC CCAATAAGCT GGCCTAAAGC CCCATAATGG GCCATGGTGC GGCC 54



- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 169 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2722:

TnCTCGCCG AAAATGACCC AGAGCGCTGC CGGCACCTGT CCTACGAGTT GCATGATAAA 60  
GAAGACAGTC ATAAGTGCGG CGACGATATC ATGCCCCGCG CCCACCGGAA GGAGCTGACT 120  
GGGTTGAAGG CTCTCAAGGG CATCGGTCGA CGCTCTCCCT TATGCGACT 169

(2) INFORMATION FOR SEQ ID NO: 2723:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2723:

CCGGGCCAAG CTGGTGATCA CCGATGTGGA GCGCCAACAT CGCATCGAGG AAAT 54

(2) INFORMATION FOR SEQ ID NO: 2724:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2724:

ATCGGTGATC ACCAGCTTGG CCCGGGACAA CTGCAGAGCG TGCAGCAGGA ATTC 54

(2) INFORMATION FOR SEQ ID NO: 2725:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2725:

AAAACCATTG TCCACCTTTA GAAAGCTTTT GTTTTGGGAA TACCTAAACC GTGGTTAATG 60

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2718:

CATATCATCA CTATATCCAT TGCCTAATAG TGATGATATT GATTGGCATA ATGGTATATG 60

10 GCAGATACGA TAACATAACn AACACCTCGG ATAATTGCTA TTAGCTGCGA AGTTATCGTG 120

CCTGATTTAA CGATGTAGA 139

(2) INFORMATION FOR SEQ ID NO: 2719:

15

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 79 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2719:

25 CTCTATCATA TCTAGCCATA TGCATGAGAT TATCGTTTAT CTCGACACGC TCTTAAAAGG 60

CGACACCGGC ATATGATGT 79

(2) INFORMATION FOR SEQ ID NO: 2720:

30

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2720:

40 CAATCACAAT TGAAATTACA CAAATACAGC CCATTGCATG ACACAGACCA ATC 53

(2) INFORMATION FOR SEQ ID NO: 2721:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2721:

CGCCCCGAGGC TACCATTTTA CCATAAAGAC CGGTCTAAAT CCTTCCGGTT TCCATGGGCC 60

ATTG 66

55

## (2) INFORMATION FOR SEQ ID NO: 2715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2715:

CCTATAACTA CTCAATATTG CAATTACACA TCCTCACTTT TGTCAATTGT TTGACAATCh 60  
 AATACACGTT ATGCACAACT CCATTTTAAAC GGAATGGAGA GCACATATGG ACAGTAAATT 120  
 AAAT 124

## (2) INFORMATION FOR SEQ ID NO: 2716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2716:

GGAATATGTA CTATTATCAT TTGATGTTAT TACTCATATT TTTTGTAATG AATGCTATCA 60  
 CCTACAAAAA ATTTACTTGA AACAGTAATA ATAATTAATT ACCACAAACC ATGATAAATT 120  
 TAATAnCTAA TCTAAAATAT CGCATGTTCA nAGCCACAAG ATATAACGCG TTCCGTAGAT 180  
 GGAACTAGAT AGTATAAGGC GCCGTGGAGC CTGGCCT 217

## (2) INFORMATION FOR SEQ ID NO: 2717:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2717:

ATGACATACG CGCATATACA TGCTATCCCG AACTAATATT GATGCGTATT ATGTAATTGG 60  
 AGCGAACACT CA 72

## (2) INFORMATION FOR SEQ ID NO: 2718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2711:

GTCCAGAATA TTAATCTGAC ACAACCATTT TAGCnGGTGG ATTAAATATA TACGACCTCA 60  
 5 CCGCAAGAAT CTCTATTTAA CTTAACCTAT CATGAATAAA CTGGCGCTTG TGATATCATA 120  
 TGAAGATTAG CGAAAGATAG C 141

(2) INFORMATION FOR SEQ ID NO: 2712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2712:

20 TGGTATTGAA TAGCAAAATT TTGACACTAT TTGCATACTC AATGATACAT CATATCGTTA 60  
 TATGGATTTT TATGGTCATT AATGGTAAGA ATTTGATACG GAATATTGGC AGGTTTGGAA 120  
 ATCAAATAAT ATGAGAAATT GTATTAACnA TTAGTCAAGT TAACGCTCAT AAATAGACTC 180  
 25 ATCnCGCGCT ATAACGCTTA CC 202

(2) INFORMATION FOR SEQ ID NO: 2713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2713:

TTGAACTGTC TAAGACTTGG ACGCTAAATG AATGCGTTGA TACAAACGGT GAATCC 56

(2) INFORMATION FOR SEQ ID NO: 2714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2714:

50 CATGACCGAC ATCAGGTGCA AACTCCCTCA TTAATCTGGG AAAACTGTAT CCCGGTAGCT 60

## (2) INFORMATION FOR SEQ ID NO: 2708:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2708:

GGAAC TTTTC TGATTAAGTG TTCACACGCC AACATAACA TGTATTCATG CACACAATTG 60  
TTGCTAA nCT CACTAACAAAC ATACGACCAT TTTACTTTCA ATACATATGA TCCGTATAAC 120  
TCGAATT CnC TGCTTATAAA TGACCATTTT GACGTTTACA ATGTTAAACG ATTGGAAATT 180  
TTAAAGTTAG CATGTCCACA TCCGAGCAGT AACTATGCCG TACCATTTGT ATA 233

## (2) INFORMATION FOR SEQ ID NO: 2709:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2709:

TTGTACCTAC CAACGAGGAT ACAATGGATG TCACACGAAA ATTGGGATAT AGATGTCCCA 60  
GT 62

## (2) INFORMATION FOR SEQ ID NO: 2710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2710:

CTTTAAAAAG GATAAATGAT TGAGAnAAAA ACCCATTCGA AAATCATGCT GCTCATGCTG 60  
TAGACTTATC GTTTGGACAC TCGCGTAAGA GCGAGCAGTG AAAT 104

## (2) INFORMATION FOR SEQ ID NO: 2711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

TCTATAACGC CTCTCATCGT TTGGTCACAT ATTACCATTA TTCATTTTAT GTTCTCGATA 60  
 ATTGTATGCG nTGTTTCTCA CTGTCATCAC ATTGATACAA CTCATTGTCA CTTTATACGA 120  
 5 TTCACACACC TCGATACGAG TGATGATATA TGACAAAGCT 160

## (2) INFORMATION FOR SEQ ID NO: 2705:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2705:

TTATTGTTTA AGATGGTTAA ATGTCATCAT ATAACanTTA ATTTTTAGCA ATTCGATATG 60  
 20 CCTATAACCT ATAAATTTCA CGTCAACAGA AAGTGACAGG CATACGGATG TGTGAA 116

## (2) INFORMATION FOR SEQ ID NO: 2706:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2706:

TTACACCTGC AGTGTATGGA CTATGGCTAG ATACAATAAT TTTAGTCATC AAnCTACATC 60  
 35 ATACAAACTT ACGACTTACA CATATCTGCT TCTAnATCTT CTAAGTATT AAAGCTCGAC 120  
 ATCGGAAGCT ATTCTAAATT ATTATCATAT ATCTAACTAA CTGACCTAAT ATATACTACC 180  
 ATAAATAACC CGCCTCAAGG TTCGCATCCG CATATAATGC TTAGAAGTC 229

## (2) INFORMATION FOR SEQ ID NO: 2707:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2707:

50 TCCATATCAA TCCTGAAAGT ACACATATAT CGTACACCAT ATGGTACAAT TTCCTATAnT 60  
 ACACATCAG CATCTTTCAA GACACATGTT AGGCGCTGGT CGGTGTATCT CAGAAATGCA 120

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2701:

TATTGCGGGC TTATTAGTAC ACGATCTATA TGATGGTCAA ACTTATGTCT TTCATATTCA 60  
 AGTGTGACAT TGTGCGGTGA TTATATTTAC GCGTCGTTAT CTACGAACGC CACATTAAGA 120  
 TTCGAAACTG ACAATCAACT CATAACGCCA TGGTCCTAGA AAn 163

## (2) INFORMATION FOR SEQ ID NO: 2702:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2702:

TAnACAATCG TAATCGAGTC AATGATGTGA ATTGCCCACG TGAGCGCTAA GAATGCGACA 60  
 TTCCACACGA TAAGGCAGTG CGCATGCGCA CTGACCTAAT AACACTGAGG ATGAGTACTA 120

## (2) INFORMATION FOR SEQ ID NO: 2703:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2703:

CTGCTTGATT AGGATCGTAT TTATATGAAG ACTGTGTTCC ATAATGATGT GCGTTTGGC 60  
 TGAAGTCCCT TAAATGTACn TGTGTATAAA TGCTATAATT TAG 103

## (2) INFORMATION FOR SEQ ID NO: 2704:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2697:

CCTATAATGC TAAACTTCAT ATATCTCTTT GGCAACTATC TCCCTTCTAT TACCAAAGTT 60  
 5 ACGATAGCAA nACAATAAAG CAAGCATGTC ATGCTTACTT C 101

(2) INFORMATION FOR SEQ ID NO: 2698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2698:

TTGATAACAT TTGAAAAGCT GCTCCGATAT CAGCAACCAT TTCATCGACC ACAATATACG 60  
 20 ACATAGTCAC AAAACTGATT AGAAGACACC AATTGCTGAT TATCAAATCA CAAATTTAAG 120  
 nTGAGATTCA A 131

(2) INFORMATION FOR SEQ ID NO: 2699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2699:

GATAGCGGTT GTTAATCAAA CGATGGTACA TGCTTACATG ATGCGCCATG TTTGATAACA 60  
 35 GCTCTCTATG ATTACGATGG AAGAATGGTT TATTTTCATCT CAATTATTCC TATTAAATGn 120  
 AACATGCCCT AGCAAACGGA TACAACACAA TCACAACATC ACTTTGAAAT TGTAAACCT 180  
 40 GAGAACCACA TACGCGnAAC AC 202

(2) INFORMATION FOR SEQ ID NO: 2700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2700:

TTCGAATTTA ACAACGTAT CACGCCATAA AGGTTGTATA TGTTGTTTGT AAATTC 56



- (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2694:

10 CTTCAGCATG AAGAAGTCGC GTGATATACA TCATATCGAT ATATACCGAT TATATCATCA 60  
 GAACATTCTC CTGGTATCAT TAGATAGATG ATAATTTGAC ACAGTCCACA ATTTGTnACA 120  
 ACGCCGAGAC TCAATGGCAT CCTGTACnTG ATCTATGCCG GAAAACACTA GTCTATATGC 180  
 15 CCGCAGACGT CCACTATATG CATC 204

## (2) INFORMATION FOR SEQ ID NO: 2695:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2695:

ATAACTCTAA TTTGAATTAT CTCTCACTAT TAAACGCGA GCTGTGTAAT AACGAACGCT 60  
 30 GACATAATCT TGTATTGTCG CATCATTCGC TGGTATTATC ATAnTGCGGT TA 112

## (2) INFORMATION FOR SEQ ID NO: 2696:

## (i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2696:

TGGCAAAT AGATGTCTGA ATAGTTTTAT TTACAAGTAC AAACCTTGTA CCATTTTAAC 60  
 GTAAACACAA TTTACTTATT GAAAAGAAAA TAAATGTATT CATGAAnACA CACTTTCCAT 120  
 45 AGCACTCATC TATAGTACTC AAATTCAG 148

## (2) INFORMATION FOR SEQ ID NO: 2697:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2690:

ACTTAAAAAA GGAAGATTAG AAAATTCATA AAAAAATTTT GCTGGGGATT CTTGATCCCA 60  
TGGGCCCCATn TCTGGATTTA GGTATTGGG TTGGCCAGCC AGGTTAGCGG GGCCCCCATT 120  
CTTCCAGGCT CGGTTTCTCC CAGGAC 146

(2) INFORMATION FOR SEQ ID NO: 2691:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2691:

ATTGGTGTCT AGATCATTTA ATACTAAACA TACAACACGA CTAATTCCAT TCA 53

25

(2) INFORMATION FOR SEQ ID NO: 2692:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 113 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2692:

TATTGAATTC AAACATATGTA CTATTTCTTA AATAATACAA TAAAAACGAC TACCATACTG 60  
GCCAGAAATA TATTTTATTT GTTACACATT AATTTCAATC CTCCATAATT TGC 113

40

(2) INFORMATION FOR SEQ ID NO: 2693:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2693:

GACTTATGTC CGTGTTCGCG TGAAGGCACG TCACGTAAAC TACCCGGTAC AGCT 54

50

(2) INFORMATION FOR SEQ ID NO: 2694:

55

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2686:

10 ATCCATCCTT ATAGGCATTC ATCCTTTAAC ACCAACGATT TACATTATGG ATATAACGAC 60  
TTGAGGGGGA ACGTGGGGTC CATCCTA 87

(2) INFORMATION FOR SEQ ID NO: 2687:

15

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 50 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2687:

25 ATGGCTGGGC GCTTTACGTG GCCACATTAG GATTATGGCA CTGAAGCGTA 50

(2) INFORMATION FOR SEQ ID NO: 2688:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 50 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

30

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2688:

AACGGTCGTA GGCAAGGGAC TCCCCCnGG nGCTAnATGA ACTGGTCGTA 50

(2) INFORMATION FOR SEQ ID NO: 2689:

40

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2689:

50 GCTAGCATCC ATGGCTCCTA TGCCGAAGCT GAGTAGACTT AGGTGACGGG TCGTGACAA 60

(2) INFORMATION FOR SEQ ID NO: 2690:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 146 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2682:

TTATCCAAGC TTCCGGATAG TTTCAAGAGA AACCAATGAA ATCCGTTATG GGACCAATGG 60

10 GT 62

(2) INFORMATION FOR SEQ ID NO: 2683:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2683:

AACAGCATTTC AAGTGAGTTA CTGGGGTTTA TGCACCATCA TTGGATATCT GCACAAGGAA 60

25 TTTCAACGTG 70

(2) INFORMATION FOR SEQ ID NO: 2684:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2684:

CTTAAAATTC CCCAGTTTCC TTCCTTTTAA ACCCCATGGA ATTATCCCGG CCAAAAATGG 60

40 ACCATTAT 68

(2) INFORMATION FOR SEQ ID NO: 2685:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2685:

TTTTAACAAA ACACCTAGAT ATGTTTCGCTG ATCAGAGATG CCTGGTGACC GGTGATCC 58

(2) INFORMATION FOR SEQ ID NO: 2686:

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2678:

AAATTGGGGC TTCCATCCCC ATTCCAAATT ATTAAAACCG TTTAGGGGCC TTATTGGCAC 60  
 CATGG 65

(2) INFORMATION FOR SEQ ID NO: 2679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2679:

ATTTTGGGAT TAAACCCTTA ATTAAAATTG GCCGGGAAAA GGAAAAGGCC GGTGGGAAA 60  
 AGGCCAAGGA AAAGACCTTG GGAACATTA AAAACCTTGG GCCAAGGCCT TCAAAAACC 120  
 GGTGGTTTTT TATTTTGGGA ACCAAATTGG GGGGCCGGGA TTGGGCCAAA ACCTTG 176

(2) INFORMATION FOR SEQ ID NO: 2680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2680:

GCCCCAAGA ATTCAAATAA CnTTTCGGAC CCGTAATGG CCACnTAATT 50

(2) INFORMATION FOR SEQ ID NO: 2681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2681:

TGTGCATTTA TTGCATAACC TATATATGTG TGACCGATAT TTAGTGCACA CTTCAATGGT 60  
 GCG 63

(2) INFORMATION FOR SEQ ID NO: 2682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2674:

5 TCCTTTGGCC AATTTTCCA AGTTTAAACC CAAACGGCCC GGGTTGGGTC CCCAATTCCA 60  
ATCCAAAATA ATTTTA 76

(2) INFORMATION FOR SEQ ID NO: 2675:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2675:

20 TCCGGGAACC TTACCCAGTG GCCCTACCCT ATGGGTTAAC CCAACCAGTG GGGCCA 56

(2) INFORMATION FOR SEQ ID NO: 2676:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2676:

TGCGGGGTCT CGTGCCGCCG TCTGCGGTGG TTGTTTGTC GGTGGTGTGT CGGAGTCTTT 60  
GCCAGCT 67

35 (2) INFORMATION FOR SEQ ID NO: 2677:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2677:

GGACAGAGGC CTTGACCCCC CCACAATCCT GATTACCGT AAGTTGCTCT CCCCC 55

(2) INFORMATION FOR SEQ ID NO: 2678:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2670:

5 ATACCAGCCA GACTTCGATC AACAGTGTTC AACTGCATTG CCCAGTAAGT TGGATAGCTC 60  
GCACATAGTG CTACAAGTTA ACATATACAn CGAGTTTGTA TCTCAAGCTT GAAGCTTGAC 120  
TACC 124

10 (2) INFORMATION FOR SEQ ID NO: 2671:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2671:

20 CGCTTACTGC ATAAAAGCCC CTAACACCGG GGCCTACGC TCGTTCGCCG GCTT 54

(2) INFORMATION FOR SEQ ID NO: 2672:

(i) SEQUENCE CHARACTERISTICS:  
25 (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2672:

TCAGCGATTT AACACTAATT CTTCTAGCTA TTCTCTGTAT TTGGACGACG A 51

35 (2) INFORMATION FOR SEQ ID NO: 2673:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
40 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2673:

45 GATAAGTTGT ACCATATTTT GATGCAATTC AATGGACAAT GAGGTCACCT GGCTTGT 57

(2) INFORMATION FOR SEQ ID NO: 2674:

(i) SEQUENCE CHARACTERISTICS:  
50 (A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2666:

5 ACAATTCAAT AGAATTTACC CGTAACAGCG TTGCACTGCA CTCAAGACGG CTGACGTATA 60  
GCAC 64

(2) INFORMATION FOR SEQ ID NO: 2667:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2667:

20 GTAGAACCAG CGACGGCGCG GCGGCTGAGC AACATCTGAC TACCTATCGG CCGCGC 56

(2) INFORMATION FOR SEQ ID NO: 2668:

25 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2668:

GGATCGATTG ACTACATGAC GTGGnGACGC AATTATACGG ATAGTCCACT 50

(2) INFORMATION FOR SEQ ID NO: 2669:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2669:

45 GCAAGATCGA ATTACAATCA CGACGATCAA CGCACGTAAT CATCTCTGAT CACAGTAA 58

(2) INFORMATION FOR SEQ ID NO: 2670:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



AAAGTAAAAC CAGTCTATTC AAAAAGGTGA AAAATGGTGA CGCAGCGTAA ATAAntGGTC 60  
 TCTGGTAGGG TAAATCGCGT TGTGGGTTTG TCACATCAGG AACT 104

(2) INFORMATION FOR SEQ ID NO: 2663:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2663:

AAAAAGAATA AAAGGACTCG AAAAACTCAA AACTTATTnT AGATAGTCAT CGTGACAAGA 60  
 AACAAACATT TAACTAGACT AAGAAAAATG CTTTCATTAA AAGGCAGACT CATCA 115

(2) INFORMATION FOR SEQ ID NO: 2664:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2664:

GCATGCGCCA CGGTGTCTCA GCAGAGTGAC TGCCACCTTG TGTGCGCAGA GTCTGCGCCT 60  
 AGTACAGTCA GGGTGAAACA CnCTATACGC ATTAGGTACA GTACTTCCTG TCTCCGACTT 120  
 GAGTAGAACG TGACATATCT ATCAGCATTC ACTCGAAAAA GGGA 164

(2) INFORMATION FOR SEQ ID NO: 2665:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2665:

AATTACGCAA TnTCCCTGTC TTAnTGAAAG GAATTGACCT GTTAATTCGT 50

(2) INFORMATION FOR SEQ ID NO: 2666:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2659:

10 CTAATCATGT CATGTCTACA ATTATTTGGA GTATTGCTGA CGAAATGCGT TGTACAACTT 60  
 TTTCAATTCTA GCACCTTGCG GGGGCCCCACA AAnGAATTGG TCCATTCTCA nCATCAGTGG 120  
 GGGGCGCGAA TAATTTTCGAA ATTATTCTGC CACTCCCACT TCATCGATTA AGTTGTAACT 180  
 15 CTACATTACA TTTGTCTTAA ACCATTG 207

(2) INFORMATION FOR SEQ ID NO: 2660:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2660:

TTAATTATGT ATAATACTTA ACAAGATCAC CTGATAGATG TCTAAATATT ATCT 54

(2) INFORMATION FOR SEQ ID NO: 2661:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2661:

40 ATTAAAAAA AATGGGGTAA TTTCCGCCAA ATCCCGTTTC CCCCTTGCCA AGGCCAAATT 60  
 TAACCACCCT TGCCAAATna TTAAGCCAAA TTTTCCGATA TTTGTTTCCG TAATGTTTCT 120  
 45 TTAATTAATA 130

(2) INFORMATION FOR SEQ ID NO: 2662:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2655:

AATCCTATTA GCACCTTATAA TGATCATGAA AAGATGTCAT CGAGAATCAC CTAGTACACG 60

(2) INFORMATION FOR SEQ ID NO: 2656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2656:

CGCCGAAAAC AATAAATTCT CGGAACATAG AATTTATCAC ATACCACGCT TGGATTATCA 60

CAATGGACTG AGTCG 75

(2) INFORMATION FOR SEQ ID NO: 2657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2657:

TATTAAATAT GCGGTTGCAT ATATCTACGG CATGATTTAA CCGTGAACCA TGAATCATTT 60

TAATCGGGCA CGCGTAAAT GCTCATTGAT CCGCAnATAC CACTATATAT CTAATAGCAA 120

GCGTCCAGGA TTCTGTGTTT TATAAATTTA AACTAACTGA AACGTGTGTA TCAGTTCCT 180

CCGnTCGATT ACCACACTTC AA 202

(2) INFORMATION FOR SEQ ID NO: 2658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2658:

CGTACATGTG CATCATGTAT CTACGTCAAT AAGATGATGG GGTCACATGA TTGGACCATT 60

(2) INFORMATION FOR SEQ ID NO: 2659:

## (2) INFORMATION FOR SEQ ID NO: 2652:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2652:

GGGCGGTAAT TGTCACCATC ACAAATTGCT ACGTTGAAAC ATCGAGGATT CAAGCTGGAC 60  
 AGCAGAG 67

## (2) INFORMATION FOR SEQ ID NO: 2653:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2653:

ACACATCTTA TATGTCTTAC TGATTTAAGG AAAGAATCAG TGGATCAAAC TG 52

## (2) INFORMATION FOR SEQ ID NO: 2654:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2654:

CAAGCTGTAA ACCAAGAATT CCAGCATTAA ATATCTCTCh TGGTATCGGT TGAGATAAAT 60  
 ATTCCGTGTG CTCATTAAAT GTAGTAATCT TTATTGTAGT TCCTCAACCT ATGACACGAA 120  
 TATTGCACAA TATTAGTATA GACAAATATT TCCTTTATAA TCTCATTCAA TTTTCTCCTT 180  
 TAATTATGTA TCATACATTG TATATTCTCA TATAGACGTT TTGnCATATT CATAGCTTCA 240  
 ATATTAGTGC ATTTATGTAT T 261

## (2) INFORMATION FOR SEQ ID NO: 2655:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2648:

TTTTAACCTA AAGAATACTA AACTAAAAG AGAATGATTC TGTACCGCTT TCCTTTTCA 60  
CTCAATAACT TTATATTTAG TTATCCTTAT AATTGTAAAT TATGTTAGTT GGTAATnTT 120  
TACATATATG TATTTGATAT GCTTGTAAT 150

(2) INFORMATION FOR SEQ ID NO: 2649:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 138 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2649:

AGTTTAACTG ACATCGAGTG GTACACAATA GCAATGGTTG TGTGTAAAGT CCTGGTGACA 60  
ACATATGAGA GTAACATTG TAGTGATTAT CTTGTACTGA GAGAATTGAC ATCTATGnAG 120  
TTTATCACGT GCAAATAT 138

(2) INFORMATION FOR SEQ ID NO: 2650:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2650:

TCACAATTGC AAACCTCTGG CACGCACTCA TCTGCGATTT CACAAGCTAC AT 52

(2) INFORMATION FOR SEQ ID NO: 2651:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2651:

GAGTCAAATT AAAATGCCTA TTGGCCATTG TGATGTATAA TCACTTAGTT CACATATACT 60

55

TACCGGTAA TTAACCAGG CCCCAGTAA AAAATCCCCG GTATCCCCA TTCCAAC

57

(2) INFORMATION FOR SEQ ID NO: 2645:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2645:

AAAGCAATTC GCCCGATAAG AGTAGAGACG AATTGCTTTT AAGGTAAAA CAAAGTGAGT

60

TCAATT

66

(2) INFORMATION FOR SEQ ID NO: 2646:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2646:

CAGTATAACT TGTGACCTAT TTAGAGGGGC ACGGTTGGTA CAATGAGTCT GAAACCGTAT

60

CAA

63

(2) INFORMATION FOR SEQ ID NO: 2647:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2647:

TAGAACATGG ACCGGTATTT TACATCCTGT ACGCCTAATC TGTTGTAAAGT ATCTTTAGTG

60

AACCGTTGCT CTGGAATAAC CGCGATTCTG GGCAAACAGT GTGTAAACCG ACTnTATGGG

120

GATGTGTGAG TAATCATTTGT GnACTGTTGA TTCTGTTCTG GAATCCCATT TCACAACACG

180

ATCTTGGAAG TGCTGTCATT TTAGATGC

208

(2) INFORMATION FOR SEQ ID NO: 2648:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2641:

CAGGCTTAAA CCTGAGTTAG TGCCATTCAT AATTGCAATC CCAAGCGACG GAA 53

10

(2) INFORMATION FOR SEQ ID NO: 2642:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 345 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2642:

20 ATGTTTGTCA TCTGGAGCnA TAGAACAGGG TTCATCATGA GTCATCAACT TACCTTCGCC 60

GACAGTGAAT TCAGCAGTAA GCGCCGTCAG ACCAGAAAAG AGATTTTCTT GTCCCGCATG 120

GAGCAGATTC TGCCATGGCA AAACATGGTG GAAGTCATCG AGCCGTTTTA CCCCAGGCT 180

25 GGTAATGGCC GCGACCTTA TCCGCTGGAA ACCATGnCTA CGCATTCACT GCATGCAGCA 240

TTGGTACAAC CTGAGCGATG GCGCGATGGA AGATGCTCTG TACGAAATCG CCTCCATGCG 300

TCTGTTTGCC CGGTTATCCC TGGATAAGCG CCTTGCCGGn CCGCA 345

30

(2) INFORMATION FOR SEQ ID NO: 2643:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 75 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2643:

40 CTTATACGGA TGTATAGGTC GGTCCAAACA TTTGATTTTA GTGGAGAGCA GCCTTTCACA 60

AATTATGTTC AATGT 75

45

(2) INFORMATION FOR SEQ ID NO: 2644:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2637:

5 TAATTCGGCA ACTAATATCA AGATCATGAT CAAATACTAC TGCCATTTTC TTATACCTCT 60  
TAATGTGAAA TCACTGnCAA CACATAACAT CTTAAACTT TGAC 104

(2) INFORMATION FOR SEQ ID NO: 2638:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 151 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2638:

20 CATTCATCCG TTTTTTTGGT TCATGTACAT ACCATTGTTT TGTACACAGC GAAGTCAGTT 60  
AACCTTATAT CCTTGATAAA CAGTTGAAAT CGGCAATATT AAACAGTACT TTCCCAATTG 120  
CTTTCCTCCT CAATTGTGCG ACGGACTGTA n 151

25 (2) INFORMATION FOR SEQ ID NO: 2639:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
30 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2639:

35 AAGATCAACT GAAATTCATG TGTGCCCCTT TATTAAGATC ACATGGAAAT A 51

(2) INFORMATION FOR SEQ ID NO: 2640:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2640:

TTAGCTAGTT GGTAGGACGG CTACCAGGCA CGTCATAGCG CCTGGAGGGG TC 52

50 (2) INFORMATION FOR SEQ ID NO: 2641:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs



AAAAGCCAAA AGGAATTAAT TAACCCCGGG GTTTAATTTT TAATGGGAAT TTG

53

(2) INFORMATION FOR SEQ ID NO: 2634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2634:

GGTGTTTACA TTCTGAAGGT TTAGAGAGTT AAGATTATAT ATATATAAGT TTTGGGGTGA

60

TAGATATG

68

(2) INFORMATION FOR SEQ ID NO: 2635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 80 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2635:

CCAATTTTAC TTGGTGCTGC CATTTCGGTC TCTCGTGAC TTGTGATTGA GGTGCCATTG

60

TTCCCGTAGA TGGTTCACAT

80

(2) INFORMATION FOR SEQ ID NO: 2636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2636:

CTTACACCCA ACTTATTGAC TTATAATCTA TTAAAGTGCC ATTTTACAAT CTGAATCCCT

60

TAATATAGCA ATAATTACAA CTTCCGACAA ATGACTTGTT TTATGTGCGT GATTCATCAA

120

TGAACATCGT AATGCGACnT AATA

144

(2) INFORMATION FOR SEQ ID NO: 2637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2629:

TGTCGCTAGG TAACCGTGCA TCGTTCACAG GTACnTATGA TTTCACnGA

50

(2) INFORMATION FOR SEQ ID NO: 2630:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2630:

GAAGGnCCCCA AACCAGGCGT TAAAGGCCGA TTGGGTTTAA ACCAAAGGTT

50

(2) INFORMATION FOR SEQ ID NO: 2631:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2631:

CGCGAGTGTA TCCGTCGATA TGTCGAGAGG AAAGATTGAA GTGTGGAAGA GTGTTGAGTA

60

ACCCT

65

(2) INFORMATION FOR SEQ ID NO: 2632:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2632:

TGAAAGAACT TTAGCTAGAC GTTCGTAAAG GTCTTTTGAC ATAAAGCTAG AGA

53

(2) INFORMATION FOR SEQ ID NO: 2633:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2625:

GTGGTCACCA GGTACGGGGG ATACAGGGGG TTAATCCCAC CTTGGATAAG TGGAAAACGG 60  
5 ATTTCC 66

(2) INFORMATION FOR SEQ ID NO: 2626:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2626:

CCACCAATGG GTGGGGGATG GAATAACCCT TAATGCGGTG GTACCCGGGT AATGGTAGCC 60  
20 CC 62

(2) INFORMATION FOR SEQ ID NO: 2627:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2627:

CATGTTTTTT CATTCTTGA TGACGACACT AGAGGTTCCC GTGTTCATTA TTAA 54

35 (2) INFORMATION FOR SEQ ID NO: 2628:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2628:

45 TTGGCCAATG GCGGATACAC CCTCTCAATT CGATACATAA CTCAAGGCTC AGTCAT 56

(2) INFORMATION FOR SEQ ID NO: 2629:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2621:

CTAAGTGTGCG CCCGAATAAC CGTCAATCCA CGGAGCACAT AGGATCTCCC ATG

53

(2) INFORMATION FOR SEQ ID NO: 2622:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 59 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2622:

TGGGACCGAT AATCATTCGC ATGAACACCT TCCACCGTCT CTTACTCACT ACCTACGGC

59

(2) INFORMATION FOR SEQ ID NO: 2623:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 64 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2623:

ATTAAATTGT TATTCGTCA TTAGGTGACA ACTTGTATGT AGATATTTTA ACATATTTTA

60

TGCT

64

(2) INFORMATION FOR SEQ ID NO: 2624:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 55 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2624:

CCGTCCCAGA ATATCATATG ACAAATGTTA AGAGACTTGA ATGATCATAC ACGTG

55

(2) INFORMATION FOR SEQ ID NO: 2625:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2617:

ACATATGATA TGAGTATATT AACGTTTAAA TTATGGATAC TCTAAAGACA GGCGATTTTG 60  
5 AnAAATCAGC AAAAAGTTAT ATGATGTAAG TGGGACAGAC ATACTAGATG TAACACATTA 120  
ACCAAGTG 128

## (2) INFORMATION FOR SEQ ID NO: 2618:

- 10 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 59 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2618:

20 CCTAACCGTG TGTGTATGTA TACCTACAAA AAAATTTACA TTGTGACACT GCGTACGTG 59

## (2) INFORMATION FOR SEQ ID NO: 2619:

- 25 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2619:

30 GCCCATGGTC AATCAGACAC ACGGATTGAA CGTTAACAAT TTATGACTTT AACA 54

## (2) INFORMATION FOR SEQ ID NO: 2620:

- 35 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2620:

45 ATCATTGTCA CATTGAGTAG CCGTAAAATG GTCAGACGAT CAATGCGAAC TGA 53

## (2) INFORMATION FOR SEQ ID NO: 2621:

- 50 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2613:

TTCTCACCAT TAACTATGCA TACTCACTTT ACACATAAAT TTGCTTAACA TGCAGAACGG 60  
5 AAATAAATCA TTACCACATA TAGATCCCAT CATATATTTA nA 102

(2) INFORMATION FOR SEQ ID NO: 2614:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2614:

TGAACTACAA GACGCTTATA TCATTGACGC ACATTTCTCG CAGTGAAAGA AACACTTGCG 60  
20 TA 62

(2) INFORMATION FOR SEQ ID NO: 2615:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 120 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2615:

TGGAGCATTT CACATACATT GGCAACCTCA TGGAGCTTAT CATTCTACCT TGGGGnACAG 60  
35 ATATAACAAC ACTAACGCAA CATGGATGGT GTCGTTGATA ACTTTCAATC TATAGAATTA 120

(2) INFORMATION FOR SEQ ID NO: 2616:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2616:

CTGTAGTAAA TTGCCAGAAT CCGTATCAAT ACCAGTCTGT GACTGCGTTG GCC 53

(2) INFORMATION FOR SEQ ID NO: 2617:

50 (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 128 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2609:

GGGTCGTCAA TTGA<sup>n</sup>GGCAG GTAGAGCATT AAGTCAGAAT TGTA<sup>n</sup>TAAAT

50

(2) INFORMATION FOR SEQ ID NO: 2610:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2610:

ATTGGGTGAT GAATTTTGAC GGTATTGTCA AGTCCAGTGG CTA<sup>n</sup>ACTTCCG G

51

(2) INFORMATION FOR SEQ ID NO: 2611:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 93 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2611:

ACAA<sup>n</sup>ACTTCG GACTGCCAAT TACATTTACC TTGGGGGGTC AGAAACAATG GGTGCATAAA

60

GGCCCGTGTT TCGAAACGGG AAAAAGCCCA GCA

93

(2) INFORMATION FOR SEQ ID NO: 2612:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 58 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2612:

ATGATGTTTT TCGGCTAATT TTTATACTGA ATTTAGTTTA ATTA<sup>n</sup>ACTTAT GATATTTT

58

(2) INFORMATION FOR SEQ ID NO: 2613:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 102 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2606:

GTTTAAAGCA ATTTGGAAGG ACATTGGTTA AAGGATGGGA GTGGCAAAAT CTGG

54

10

(2) INFORMATION FOR SEQ ID NO: 2607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs

(B) TYPE: nucleic acid

15

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2607:

20

GTTTTAGCTG AAGTTAATGA TGAAGATATC GGAGCTATGG TAATTAAACT AGTTAAACTT 60

ATTTTCATGC TTGATTATGT TTTATTTTCAT TCAATTCAAA AAAGCTATAC AACACATATG 120

25

AATGAGCTTA AAAATTGTTT CGATTACATA GCTGAATTAG ATAATCATTG TGCATTAGCA 180

ATGTATCGTA GAACGCTAGA ATGTTATACT GAACCACAAA TTGATGATTC AAATGATGGC 240

ATAGTATTCT CTGAGTTAAC ACATCCACTC ATAGCAGATG GCAGTAGCCA ATGATTTChC 300

30

ACTATCACAn AATATACTGT TAACTGGGGT CGAATGCTTC GGGnTAAATC AACATTTTAT 360

GGAAAT 366

(2) INFORMATION FOR SEQ ID NO: 2608:

35

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 142 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

40

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2608:

45

TTCTTAGACG TCAGGTGGCA CTTTTCGGGG AAATGTGCGC GGAACCCCTA TTTGTTTATT 60

TTTCTAAATA CATTCAAATA TGTATCCGCT CATGAGACAA TAACCCTGTA TAAATGCTTC 120

AATAATATTn GAAAAAGGAA GA 142

50

(2) INFORMATION FOR SEQ ID NO: 2609:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

55

(C) STRANDEDNESS: double



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2602:

CGGTTGCCAG CCAAAACTTG GCAnCCAAGG CAATTATAGC AAGGCACCCA CCTAAATTG 60

10 CGGACCACCC GGAATGCGGC CACCAAAGTT GGTGGGAGGC CATTTTAA 108

(2) INFORMATION FOR SEQ ID NO: 2603:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2603:

AAGCTTATAA CTATTTGTGT TTGTGATCGA GATAGGTTTG CCTGTAAAAA TGGCCATCA 59

25 (2) INFORMATION FOR SEQ ID NO: 2604:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2604:

35 ACGTCCAAAG GGCCGTTTCG CCCAGAnGTG CTGGCAAGGT TCCACAACGn 50

(2) INFORMATION FOR SEQ ID NO: 2605:

(i) SEQUENCE CHARACTERISTICS:

40

(A) LENGTH: 107 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2605:

GTCCAATGTC ACATTAATTG ATTGGTATAA GCGATCACAA GGnCATAGTG AATATTTTGC 60

50 ACCAGACGGT GTACATTTAG AGTACAAAGG AGTCCTAGCT TTAAAAG 107

(2) INFORMATION FOR SEQ ID NO: 2606:

(i) SEQUENCE CHARACTERISTICS:

55

(A) LENGTH: 54 base pairs

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2598:

5 ATTAATTGGG GAGTTAAATT AAAAAAAGG GGTCCTTCC AACCGGanCC ATTCCCATT 60  
TGGATTAAAA ATTCCCGCCT TTGAAAAAAT TGTTTGCCGA ACCGCCCTTA AG 112

(2) INFORMATION FOR SEQ ID NO: 2599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2599:

20 ATACCGCCCC CAGTTCAATA AGAAGCCCTG GATCAGACCT GACCCTGGTA TGGGGGGAAT 60  
CCC 63

(2) INFORMATION FOR SEQ ID NO: 2600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2600:

30 ATACTATGGA ATGCCTTAAT GGTGGATAAT TTCACCAAAT TAATTTTAAA AAC 53

(2) INFORMATION FOR SEQ ID NO: 2601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2601:

45 AACTAAAGGT TCTAAAGATA CAGTAAAAAT TGAAAATAAC TATAAAATGC GTGGCGAGAA 60  
AAAAGATGGT AGT 73

(2) INFORMATION FOR SEQ ID NO: 2602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs

## (2) INFORMATION FOR SEQ ID NO: 2595:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2595:

AAAAAGTATT AAAAATTGCA ATTCTTAAAC TGTTATTCAT ATTAATATTT CTAGCAAATA 60  
 ACATTGTAAA ATAAAGAAAA ATAATTAnAG TATTGCACTT TATTGAAATT TATATTACGA 120  
 TAGTAATGCA GAAATTTATA TATGCAAAAT ATTATA 156

## (2) INFORMATION FOR SEQ ID NO: 2596:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2596:

TGATCCGCAA ATCGCTGAAC ACGTTCTTCT ATTGGAATCC CTCCATTCAC TTTTAGCTAG 60  
 AC 62

## (2) INFORMATION FOR SEQ ID NO: 2597:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2597:

TTACCTTTAG nTTTTAAAAC CTGACCCTCC AACCAGCCTA ATTGGTTAAA TGGGGATCCA 60  
 TTTATATAAT CCCAGGCCTA ACCTTCCAAG GACCAACCTA AGGGATTAAT CCCCCCAATG 120  
 GCCAAAGTGG GATGGGTAAT 140

## (2) INFORMATION FOR SEQ ID NO: 2598:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

TGATTTTnAA TTATTTATAT

200

## (2) INFORMATION FOR SEQ ID NO: 2592:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2592:

TGCATTAATC ATCTTGGATA CTCTTTCTAC CAAAGTAATG ATTGCACTAC CATGACGACG 60  
 ACCAGCAATA GTAT 74

## (2) INFORMATION FOR SEQ ID NO: 2593:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2593:

CACCTGCTCA CCTCTATTTT CAAACAATTA TGATTGAATT GAATCATTCT AATTTTTGTA 60  
 AAGTTACTTG TTTAATTTAT TATATTTATT AACTCTATGA TAACAAAAAT ACTGTTTGTG 120  
 TATAACAATA AATTGAGATA CTCAATAATT TGATAATGTG AAATTGATAC TTTTCAAAAT 180  
 AGTTGAATAT GACAATTAAT GATTAGTTTT GCAATGGTGC TATAAnCAAT ATTTAGCAGT 240  
 TATC 244

## (2) INFORMATION FOR SEQ ID NO: 2594:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2594:

ATATGGTATG GAACTAACGG AAGAAGGCTT AGCATACGTT AAATATGCTA AAGTGATTTT 60  
 AGATAGTAAT AGCGAATACG AGAGAGAnAT AAAAGGACTT TACAATAAGA AGGTAAATAT 120  
 AAGTATTAAC ATGCAAGAnA GTCAGTATTT GTATCGCTAC TATAATAAGA TTAGTGAATG 180

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2588:

GnGCAATTAT ACCACTATAT TTATTTCTTA TACTCCATTT GATTTATAGT TGTATTAATA 60  
 CATTGACTCA AAAACTAATT AATCAAATAT GTTTTTTAGA TT 102

(2) INFORMATION FOR SEQ ID NO: 2589:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2589:

GCATAATATC GGATATGCGn GTGTGTCAGT CnCATAGTCG nTGGATTGCG 50

(2) INFORMATION FOR SEQ ID NO: 2590:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2590:

TTAnAAATTG CCTnTCCAAT TnTAAGAATC CTTTTTCCAA GGTAACAAAAA 50

(2) INFORMATION FOR SEQ ID NO: 2591:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2591:

CTTCATCCCT TACTTTTAAT TGTCACGTCA AATAATATTT GTCTTTAACT AGTAATAACT 60  
 CCAAATATAT TTAGTTTGTG GTGCTAGCTA TAAACACAAA TGAnTCATAA CACTATATTT 120

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2584:

TCGACTAATG TAATGTAGGC ATTGGACGTC AAATGTAATG TGGGGCAATC CGACGAGATG 60

10 ATGGTGC 67

(2) INFORMATION FOR SEQ ID NO: 2585:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2585:

CGTAACCGCC CTTGTCCGG GCCCTCCAAG CTTTTTAAGG GGACCCCCCG GA 52

(2) INFORMATION FOR SEQ ID NO: 2586:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2586:

35 ATTAGCAACA ATGTCAGATA ATCGATACCA ACTAATTAGG CGAGAAGCGG TTTCTCATGG 60

TCTTAGTGGC CTAGAAATTG ATGTATTTGA TTTGCATTCA AATAAGTCTA GACATATTAG 120

CTCGTTATCA GGTGGAGAAA CTTTCCAATC GTCGCTTGCA nTAGCTTTAG GGTAAAGCGA 180

40 AATTGTACAG CAGCAATCAG GAGGTATTTT ACTAnAATCA ATATTTATTG ATGAAGGA 238

(2) INFORMATION FOR SEQ ID NO: 2587:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2587:

ACTGGAAAAA ACCGChAACA CGACATTGTC AAAACGACGG CCAGTGCCAA 50

55

ACTACAACCTT CGATTTAAGC TATATTTATA AAAAAATGCG CCTACTCATA ACATTCTTTG 180  
 GCTATTTAAC TTTAATAAGC TAGGGCCAAG TTTGTCATAA GATAAGCGCA C 231

(2) INFORMATION FOR SEQ ID NO: 2581:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2581:

ACTTCGTAAA ATTTATCTTG AGTGGTTGTT TCTATATTAA GATTCATTTC ATTACACTCC 60

(2) INFORMATION FOR SEQ ID NO: 2582:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2582:

GTCAAATGCT GAGTTCTAAT AATGATGTTG GCCACCATGC ATACAAAAAT GCTAAAAGAG 60

AATTACGCAA GATTTTAGAT AGCTATCTCG AAAATGGTAA ATTAAAATAT TACGATATTA 120

TCGTTACAAG CAATTTAGCT ACTAAACATC CGTTTTTCGA GTATGCACGT TCATTTGATT 180

TTATCATTGT TTCAGATATC GGTTTAATAA ACGTTGATGT AAAAAGCTGG GGTGAAAAAA 240

CATTTTATCA CTTTGATGTA CCTGATGAGC ATGATACAGA nAnA 284

(2) INFORMATION FOR SEQ ID NO: 2583:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2583:

GAGTCAGTCG AAGTTTGTCTG TTCGACCCGT AGAAGTGTA ACGGCATTG TGAATG 56

(2) INFORMATION FOR SEQ ID NO: 2584:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs

CACATTGAGG TGCAGTCATA CCTTGTTTAA ATGTCCAAGC ACGTACTTCT T

51

## (2) INFORMATION FOR SEQ ID NO: 2578:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2578:

15	AATTATGACT ACAGGTCTGA CTCCCCCTTG TTCAGATCCC TGTACTGGTG ATAAATCTGC	60
	TAAATAAACA TCTCCTCGTC TAATCATTCA TTCGTTGAAT TAGAAGATAA ATATGTTTCG	120
	TTGCAATCGC ATGCTTCACA CTCTATCGGA AAAGCTTCGT TCGCTAGGGA GAGATTTAAA	180
20	TCAGCCATTT GTGAATATCC TTCTTTTAAA GATTGTTCTA AGCTATGACT TCTATTTTGA	240
	CTAAAAGATA ACATATGAGA ACCTCCAATT GATTCCAAAA GTTATTAAAT GACCTTTAAT	300
	TACTCTAATG ATAACAAATT TTATATGCAC TGACCATATT ATTTTAACAA TTCATTTGTT	360
25	ACAAAACGGT GGATCACCCA TCATGGATAG AGTCGCGGGn	400

## (2) INFORMATION FOR SEQ ID NO: 2579:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 112 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2579:

35	ATAAAAACCT AATTGACTCA TAATCTTCTA ACGGTATATC ATCCACAATC ACAGTATGAT	60
40	TAGGATTATC GTTAGATACA TCTnTCACTG CCTTATCTAA CCCCTCATCA CC	112

## (2) INFORMATION FOR SEQ ID NO: 2580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2580:

50	CATGAnTnTA ACGGATTCAT TCCATATATC AATTGCGTTT GTTATTTTAA TAATGCTATT	60
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55



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2574:

TACAATTACA AACGCATCGT GAGATGTTTT AAGCATCAAT GAGAATCTAA CTCTCCAAG 59

(2) INFORMATION FOR SEQ ID NO: 2575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2575:

GACACAACGT ATGACGCATG AAGAGTTGCG TGTGACAAT CAAGATGATC ATAGCCAAGT 60  
 TAGTCTAAAT GGTACACAA AGGGGTCTGA GAAAGATCAA GAAGCATTCA CTAATAATAA 120  
 GGATGAGGAA GCAGTTGCTG CTAAAAATCC TGAATCAGAA GAATATAAAG TGAATGAAAA 180  
 AATAAAAAAA GAACATAAAA ACTTTATTTT TGGTGAAGGT GTTTCAnGCG GTAAAAATATT 240  
 AGCGGCATTA TTATTCGGTA TGTTTATTGC GATTTTAAAC CAAACATTAT TAAATGTTGn 300  
 TTTACCAAAA ATTAATACGG AATTTAATAT TTCTGCGTCA AnAGGGCAAG GTTGATGACG 360  
 GGATTCATGT TAGTAAACGG TATTTTAATA CCAATTACGG 400

(2) INFORMATION FOR SEQ ID NO: 2576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2576:

TTTAAATCGT ACCTTAAATT TGAAAGTAAT AAGACACACC AATTACCTTC TAACTCTATC 60  
 GATAGTTTCA AACAAGAAAT CGnTAGTACA TTCAGTTATT TAGAACGCGT TGATTACCAG 120  
 CT 122

(2) INFORMATION FOR SEQ ID NO: 2577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2571:

AGCTCCTTTC TTTCTAGTTA ATATCATThA ATCTTGTTTT TCAGTGTCAA AATTACCTGT 60  
 5 AAAAAACAACA TTTTATCTT TTAAATAGG GATTACACTT TCCACTTCTA TTTTATTAAT 120  
 CTCAGATATT TTCATATGAA TTTTGTGAAA TCCTGAATCG AAAAGTTTAG TTGG 174

(2) INFORMATION FOR SEQ ID NO: 2572:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2572:

CATGCGGTAG GTATTTCTAA TCTATGGACA AATGGCGGAT TTATGCCAAA TGGTATTGTT 60  
 20 GGTTTCTTCT TTGCATTATC AATTGTAATT GGTTCATACC AAGGTGTGGA ACTGATAGGT 120  
 ATTACGGCAG GTGAAACTAA AGATCCTCAG AAAAATATCG TTAAAGCAGT GAATGGTGTT 180  
 25 ATCTGGAGAA TTTTAATTTT CTATTAGGC GCTATTTTTG TTATTGTTTC AGTGTATCCT 240  
 TGGAATCAAT TAGGAGACAT TGGAAGTCCG TTTGTTGCAA CATTGCTAA AATCGGTATT 300  
 ACATTTGCAG CTGGATTAAT TAACTTTGTT GTAnTAACTG CAGCAATGTC AGGATGnAAC 360  
 30 TCAGGGnATT TGCAGTGCGA GTCGTAATGA 390

(2) INFORMATION FOR SEQ ID NO: 2573:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2573:

TAGAGTACAG AACATACGCA AGGAACTCGG AGTTTACTCA CGGGACTTnT 50

(2) INFORMATION FOR SEQ ID NO: 2574:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

- (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2568:

10 TTTTAGGATT TGTAGTAGGT GAGCGACGTA TTnnGGATGC AATCCAGAGA ACAATAAATA 60  
 TTGAGAGAGA GCAATTCATA ACGCAGTTGA AATACATGTG TTACGAATTG CTTTTATGTT 120  
 AGTTTTTATC ACACAAGTTT TTTGATGCAA CCCCGTGATA GCGAAACTCA TATGTAGATA 180  
 15 ATACAGCTTT TTCAGCATCA TCTACATGAA TTCCAAAACA TCA 223

(2) INFORMATION FOR SEQ ID NO: 2569:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2569:

AATAATGCCA TACAGTGAAG ACCATGCGCA TCAATCGATG TCTAGTGTGT ACTACGTC 58

(2) INFORMATION FOR SEQ ID NO: 2570:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2570:

40 CGTTTCATTA GTTTTAAATG ATCCCCAATA CTTTTTGTAC CTTACCAAC TATCGTTCCA 60  
 ACACTATCTA CAGCTTTTTC TGTGGTATTT TTAAACAGCG TCTATTTAAT GTCTTATCCA 120  
 ATTAGTTTTA TCTCTTAATC CAAATTTATT AGTATGAAAA GTCCAATTTT TAAGAATTGT 180  
 45 CTAAACAGAT TCCGCAACAA AACCAGCTAn AAACCGTCCA TACTATTGGA ATnAAAACGC 240  
 CAATGTTATA 250

(2) INFORMATION FOR SEQ ID NO: 2571:

50

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 174 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2564:  
AGACATGGGC TTATCAGATA AAGTAAAGC ATTACCTAAA GGGGAGGCG GTAAGTCATT 60  
10 ACCG 64

(2) INFORMATION FOR SEQ ID NO: 2565:

(i) SEQUENCE CHARACTERISTICS:  
15 (A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2565:  
GTTTGTATAT AGTACCCTGG ATTTTCTTTA TTTCCATCAT GTGAACTGT GTCAGTGAAC 60  
GCTGAT 66

25 (2) INFORMATION FOR SEQ ID NO: 2566:

(i) SEQUENCE CHARACTERISTICS:  
30 (A) LENGTH: 75 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2566:  
TTAATTATTT GTGACGTATT ACACGCATTA CTTTAGAAAG TGATTCCCAA AGCGAATTAT 60  
CTTTACGATA AACTA 75

40 (2) INFORMATION FOR SEQ ID NO: 2567:

(i) SEQUENCE CHARACTERISTICS:  
45 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2567:  
50 ATATTATTAT ATTGCTTTTT TTCAGTTTGC CGTTGTTACT TTCATAACTT 50

(2) INFORMATION FOR SEQ ID NO: 2568:

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2560:

GTAAGACATT CACATTTATC ATTTACCAC AATGGGTTTA CCAACCATGG TTTAACGAAT 60  
 5 CCAAAACTTT GATGCTCGTA TGTCTCA 87

(2) INFORMATION FOR SEQ ID NO: 2561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2561:

TTGCATTTTG ACGTAAATGA TTAACAAAT CGTGATTATC TCTTAATTTT CTAACCGCCT 60  
 20 TTTCAATTTT TAACGGCGTA ACTTCCTTTA GAACAATGCC AAATTTATAT TTnTCAT 117

(2) INFORMATION FOR SEQ ID NO: 2562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2562:

AAGTCAAACA AAATAAGCAA ACAGACTGGT CAGAAGATAA GTTGAATAAT ATAGCTTTGA 60

(2) INFORMATION FOR SEQ ID NO: 2563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 80 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2563:

AAGTGTTATT ATTGTGATCA TAAAGTGAAG TATTACCTTT TTTATTCGTA ACCCGATTCC 60  
 45 ATGCGCCTTC AACATAAACT 80

(2) INFORMATION FOR SEQ ID NO: 2564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs

TATTTCAA

248

## (2) INFORMATION FOR SEQ ID NO: 2558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2558:

TTTGGGTCGT GATTGAAAAA ATCTAAGGCT AATAAACCAT GTTGTTCTGC GCTTAATAAT 60  
 TGTTTGAGTA TACGGTTAAT AATTAAGTCT GTATCATGAG GGTTGACGCG AAAGTCAGAG 120  
 CGCATATAAG TCATATAATT CTCGAAGATT TCTCTATCAG TATTGCTTAA TCTTAATGAT 180  
 TTAACATTAT TTTCTTTTGT TAATTGCGCA GTACTTTTCA TTGTTACTTA AGCGCTCCTT 240  
 TAAAAATGTT TAATTCCAAA TTAAATGGA AATGATTTTA TAGTATTAAT AAGGTCAATC 300  
 ATATCATATT AAACGCATAA ATATAACGAT TAATATTGGA GAGGAAAATG AGGACACTTA 360  
 ATAAAGATGA ACATAATTAT ATCAAGCAAA TAGCTAATAT 400

## (2) INFORMATION FOR SEQ ID NO: 2559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2559:

AAGGGAAATT TAAAAGTATC ATTTGATTAT ATAGATTGGA TTAAATTAGG TTTTGGCCCA 60  
 TCAGGAAAGG AAAACTACTA TATGTACAAA AAATTTGGTA TTTTACCAGA TATGGAATAT 120  
 GAAATGGAAG AAATTCGAGC AGTAGAGAAG TATGTTAAAG AGCAAGAGTA GCAGACATGT 180  
 TATAAAAGAC TGTGCAAAAT CACCCTCGTT TTACATTTGA TTCAAAGAAG AAGGTAAAAG 240  
 ATAAGANTAT TTGCAACTTA AAAAGTCAAT nAGCTTATCG GTATCCATAC ATCATGGATA 300  
 AATGAGTnCA ACTAATTAAC AAATCACGAT ATA 333

## (2) INFORMATION FOR SEQ ID NO: 2560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

AAAATCGTTG AATAATCAAT CATAGCAGTA AGCTATGTnA TATATTTTnA AAAATTGA 118

(2) INFORMATION FOR SEQ ID NO: 2555:

- 5 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2555:

15 ACAACTTCAA AGAAATCATG TCACAAAAAA AGTATTTGAT TTTAATCATA nGTGGCGACA 60  
 ATCCGCATAC CAAAGCACAA CCTTTAGTCA ACCAATTCAG AT 102

(2) INFORMATION FOR SEQ ID NO: 2556:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2556:

AGATGCATTA GCAGCATTAG ACGTTAAACC AGTTGGTATT GCTGATGATG GTAAGAAAAA 60  
 30 ACGTATCATT AAACCAGTTA GAGAAAAAAT TGGGGATTAT ACTTCTGTAG GTACACGTAA 120  
 ACAGCCAAAC TTAGAAGAAA TTAGTAAATT AAAACCGGAT TTAATTATCG CTGATAGCAG 180  
 TAGACATAnA GGTATTAATA AAGAATTAAn CAAATTGCA CCAACATTAT CATTAAAGAG 240  
 35 TT 242

(2) INFORMATION FOR SEQ ID NO: 2557:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 248 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2557:

TGCACTCATA ATCATCGGAA TATGTATAGA ATCAACTATC ACTTTGCCGT GTTTATCTGT 60  
 50 GTTAAATGTG TAACCATAAC AGTGTGTCCC ATTTGGATTA TGAATCTCAG AATAATCATC 120  
 AAAAATATCC TGAATTTnCA AATTAATTTT ATTATAGCGG nAGCAATGTC TATAAAATTT 180

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2551:

	CAGTAAGAGG ACAAGGCTAT AAGGTGGAGA ATCATGTTTA AAACACTCTA TGCTAGAATT	60
5	GCGATTATT CCATTACGGT TATTTTATTT AGTGCATTAA TAAGTTTGT ATTAACAAAT	120
	GTTTACTATC ATTATAATTT AAAAGCATCT AATGACGCGA AAATCATGAA GACGCTTAAA	180
	GAAGCAAGAC AATATGAACA ATCAGCTAAA CCAACGCACA TTCAACAATA TTTCCAnACA	240
10	TTTAGGGTCA AATGGAATTA CCAAATAATG ACCATGGATC CATAAAGGTC nTnAGACCTT	300
	TTT	303

(2) INFORMATION FOR SEQ ID NO: 2552:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 150 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2552:

25	TTTACTTTAG CCTTTATTGC ATTTGTAATT TATAGAACTG CGAACAGGTG ACTACTGTnA	60
	ATTTATGTGA TTAAAGTTTC AATGATATTT GATTTATTAG ACCATTGCAA AAGCGCAAGG	120
	TTCTCATGTG CTGCTACAGT TTGCGGTCTT	150

(2) INFORMATION FOR SEQ ID NO: 2553:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2553:

40	GCACTCGTCA ATAAAGATGA AGCAGCATTT AATCAATATA CGGCAGAATA CAAAAATT	58
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(2) INFORMATION FOR SEQ ID NO: 2554:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 118 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2554:



## (2) INFORMATION FOR SEQ ID NO: 2548:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2548:

AAAGTGAAAA TTGGAGGTGT AATTTTGA CT AGA ACTTATA ATATTATTGG TATCCTTTCT 60  
 TGTCTTATAT CTTTTATTAT TATGGCGTTA CCAATnATTT GGTACACAGC TTCAGCATT A 120  
 TGGTTCCTCC CAGGTGCAAT CA 142

## (2) INFORMATION FOR SEQ ID NO: 2549:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2549:

CCCAACCCTA CnAACGACAT TACACAATCA GTAACAGATC GGTATTAA GA CTGGATATCG 60  
 TGGCATCTGT TGAGTTAATA TCAACAGTCG TCCAGAACTC G 101

## (2) INFORMATION FOR SEQ ID NO: 2550:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2550:

TGTAACCATG ATTTAGATGA CTAAACGTGC TTGCCAACAT GCTTCATCCA ATGCCGAATC 60  
 CTTTAGCTAC AT 72

## (2) INFORMATION FOR SEQ ID NO: 2551:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2544:

10 AGCTATTAAT GGCGCTATAA TTGATACAAT AGTTATGATT AATAAAAAAA TAACCGATAA 60  
 CATTGCAATT TTATnATGAA TAAATTTAGG AAATGCAATT TT 102

(2) INFORMATION FOR SEQ ID NO: 2545:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2545:

25 AATCTACATC CAGCATGATC nACATCAnAG CnGGATTAC CCTTACTTCA 50

(2) INFORMATION FOR SEQ ID NO: 2546:

30

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2546:

AACCATTCAA CACACGACAC TAAAGTGCAG TACAATCCTA CAAAACGATT GTTTTTATCG 60  
 GGTGGTCTAA CCATTGAATA AATAATGAAT AATGGTAAnA 100

40

(2) INFORMATION FOR SEQ ID NO: 2547:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2547:

ATTGAAAATC TTTTATCATT TCATACGTGT GCATAATTAA AAAGGTGAAA CCTCTTATTT 60  
 TGAGATTTCA CCTTTTTTAT TGTTAATTTA AATTTAATTT TAATGATTAT TTTGTTTCAC 120

55

CAATCAATTT GTCTATCTGT TGAGTGGCAA CCTCTAATAA GCCTTTTATA TTGTCA

56

## (2) INFORMATION FOR SEQ ID NO: 2541:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2541:

TGGAAATAAC GAAAGTATTA TTAATTTAAA GCATCTTCT CCCAATACTT TAATGAGTGA 60

TATTGTTTAT ATACCGTATA AAACACCTAT TTTnGAGGAA GCAGAGCGCA AGGGAAACCA 120

TATTTA 126

## (2) INFORMATION FOR SEQ ID NO: 2542:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2542:

ATCAGTTTCT TCAAAAATAA CTGAAGTATC TGATGCTGAA AATTGGAATA GTTGATGGGT 60

CGGGnTATTG ATTTTTATCT GATGTAAAAA TCCATAAGTG CCATAAGATG TATATAGTTT 120

CTTCATATGA AAGGTCCCCC TTATGThTTT ATTTATTATA CGATGATAAA CTAGTCATTA 180

CCACTATTAA TAATTGATTA A 201

## (2) INFORMATION FOR SEQ ID NO: 2543:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2543:

GAACCTTTATT ACAGGAATAG ATAAGCACAG TCGTGTTACA CAGACGCTAA ATGCGCGTTC 60

GTATG 65

## (2) INFORMATION FOR SEQ ID NO: 2544:

## (2) INFORMATION FOR SEQ ID NO: 2537:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2537:

GGATGTACCA CCAGCATAAT AAACAAC TTC AAATGGATTG ATAAAGAAGA nACCAGCAGA 60  
GATAGGTAAT TCATTACCAT GTTCTTCTTG TAGACGTTTA CCTTCTTCAA TCTTTTGCTC 120  
ATTTGCATCA AGTTGTTGTT GTAAGTTATC TCGCTTGT 158

## (2) INFORMATION FOR SEQ ID NO: 2538:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2538:

TATATTCATT AAATCCACAA AGCGGTCCCG TATAACATG GGTTCATT 50

## (2) INFORMATION FOR SEQ ID NO: 2539:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2539:

AAAGTATACA TATCACTCAA CTAATCAATA ATCATACTTA CCTTCAACAA ATTCTTTAAC 60  
ATGCAGTGTT ATCCCTTGAT AATATGGATA TTTnGTTAAT CTA 103

## (2) INFORMATION FOR SEQ ID NO: 2540:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (2) INFORMATION FOR SEQ ID NO: 2533:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2533:

GAGAGCGGCC GCGTGTAAAG AGAGCGGCGT TCGTTCGCGT GACGCGAGTG TGGTTCGCGA 60  
GAAGnGGACC AGAGTTCCCG ATCGAGGCTG TTCGGGTAAA T 101

## (2) INFORMATION FOR SEQ ID NO: 2534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2534:

TTGCTCATT AAGATTATCC CAATCAATAT CATCTATATT TGTGTACCA CTATTATCTT 60  
TTTCTCTTTC TCTTACTTTG TnCATTTGTAC CAGTAGATTC AAGATATATT GT 112

## (2) INFORMATION FOR SEQ ID NO: 2535:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2535:

ATAACGAATC CAAAAATATA GAGAATGACA GTGAAACTTA AATAGGACTC T 51

## (2) INFORMATION FOR SEQ ID NO: 2536:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2536:

GATTAAATTT GTTATACCTG GCTTGTGTGTC ACGATCAAAT TTAATAATAC CATCTGAATC 60  
 AGTTACTGCG CTTTTAATTT TTTTAGCTGC AACATTGGC TCGTCTAATA ATGAAATnGA 120  
 5 GTTTTTAGCA TTATCATCAC TCTTACTCAT 150

(2) INFORMATION FOR SEQ ID NO: 2530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2530:

TTCTTTTGG CCAGTGGCAG GAAGTACGGT CTTATTGGT GTTATGTTAA GAAGGTATTC 60  
 20 CCATTTATTT ATCGTTAAAT ATGnATATAG TATAGTAATT TTAATTTGTT GCATCATAAT 120  
 ACTAGGT 127

(2) INFORMATION FOR SEQ ID NO: 2531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2531:

CACATAATGA TTCGAATTAT TGTTTTAATT AAACCTTTTT CACATATGTA TAAATTTTAn 60  
 35 AGAGCGCATG CGTGAATATT TTCATTTGAT TCAAAGGCAA AAGATAGCCT TATACTCTTT 120  
 TC 122

(2) INFORMATION FOR SEQ ID NO: 2532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2532:

AAATAATAGA GCAATTGGCA CATGTAAGAA TGCAAATTGA CTATGGCATC CAGTATTTTG 60  
 50 GTCACAAATG GGTGTATAT GAGCATGTTG AAAAATAAGT CTTATGnTAA AACTTAGTA 120

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2526:

CACGCGTCCG GCCACCTGGA CATGGCCGAC CTAGAAGCCA AGCTGCAnGA GGCCCAGAAG 60  
 10 CATCGGCTGC GCCTGGGTGG CCACTGATGG GGCCTTTTCC ATGGATGGCG ACATCGCACC 120  
 CCTGCAGGAG ATCTGCTGCC TCGCCTCTAG ATATGGTGCC CTGGTCTTCA TGGATGAATG 180  
 CCATGCCACT GGCTTCCTGG GGCCCACAGn ACGGGGCACA GATGAGCTGC TGGGTGTGAT 240  
 15 GGACCAGGTC ACCATCATCA A 261

(2) INFORMATION FOR SEQ ID NO: 2527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2527:

CTnTAGAGGA TATGAGTTCC TCATCATAAG AATTTCTGGA TCCTTAATAG ATCTCTTGCT 60  
 30 ATATATAATG TAATAGAAAC ATCTTTTAAG GATCCAGAAA TTCTTAGA 108

(2) INFORMATION FOR SEQ ID NO: 2528:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2528:

TTTTAAAATA CTTGGTAGAA GTTGAATGG ATTAATCATT AATTATCTCT CAAGATGTAA 60  
 45 TGACTGTTCA GCACACTTTT CCGATATGAA AAGAGATTG AAnACAATA 109

(2) INFORMATION FOR SEQ ID NO: 2529:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 150 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2523:

CAGTAACATC AATCTGTCCT GTAAGCTTGT GGTACTCCGA TACAACCATA AGTCAACGCA	60
CCACCAAAAA CGCCTTGGAG CCGTTCTACT TATTAGTCCA AGTTTAGACA TTGAAATACC	120
AACAACTTTG CAnTCCATAG TATCTGAAAA TGTAACATT GCCTGCAATA AATTTAAChC	180
ATCATTTTTA TTATGTGGCA TTAAGCTAA TTAAACGTAT TCTGGGTT	228

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(2) INFORMATION FOR SEQ ID NO: 2524:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 119 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2524:

CTCATCCATA GCGCTGGTAT TAGTATAGGT GTCAAACCAT TAGCGTATAT CATATCTTCT	60
GGATGThCTC ACATATTCAT AGATGCACAT TTTACTTCTC TCGTACCTTA GTACTGGGA	119

25

(2) INFORMATION FOR SEQ ID NO: 2525:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 357 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2525:

TACCAATATT AAATTTGAAC ATTATAGTTT GACCATCATA ATCTATCTTC TCTATTTTAT	60
TATAACTAAT ACTTCTATAA TAAAATTGGC CATTTCATATC TACATTCATA ATTAATCTTT	120
CATTTGTTGC TATAAATGCC CCTTCAAATT CATTCTCACC TTGAACTTGA TACTCAATTA	180
TTCTTAGCAC TGACGGACCC TTTTTTTCAG TTGGAAATAA ATCATTTGGA TTCACATTAT	240
CTAAAATCAT AATATCCCTC CCACTTAAAA CTATAAACTA TTCTTCATAG GTATATGAAA	300
TACAAGTGAT TAACTATTnA ThATnAAGCT TAACTTGTAT TCCCTTTTCA AGATAAT	357

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(2) INFORMATION FOR SEQ ID NO: 2526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs

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GGTTTGCTAC AAAAGAAGCG TCAGTAAAGC ATTAGGCCCC GGCCTnnGGA AACA

294

## (2) INFORMATION FOR SEQ ID NO: 2520:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2520:

TTTTAGGCCG AAGAnGTAGT AATTTCCGGT CCTTTAAGGG GCGGGTGGTT AACCATGGCA 60  
 ATTAATCCCA GGGATGACCT TACCTAATAA CCACCTAATA ATTACCCGGA CCAAAGGTGG 120  
 AAATAATCCC TCCGGTCCTT CCCGG 145

## (2) INFORMATION FOR SEQ ID NO: 2521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2521:

TTTtagTCAC CAAAATTCTC GCATTAACT GATACGAATG TGCAATAACT AAAAATCGAT 60  
 CTAATAATTG CGTTGAAAAA TTTGGCTCGA CAGCACTCAT TACAATTACn AGTGTATCTA 120  
 TATTACTTAC AGGTGGTCTT TTCAACTCAT TTTCCCGCTC AAACACTTG 169

## (2) INFORMATION FOR SEQ ID NO: 2522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2522:

ATCCAGCCTT TCAACAAATA AATCTGAAAT TCGATGTTCT AAAATTTCTG CTTCTTGATG 60  
 TACTTCTTCC CAATTATATT TCAATATT 88

## (2) INFORMATION FOR SEQ ID NO: 2523:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs

- (A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2516:

CTGCACCACC AATAACGTAA ATACTGTATA TACTAGTAAT CGCTAATACA CCGATATTA 59

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(2) INFORMATION FOR SEQ ID NO: 2517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2517:

TCTGCTACTA CGTATACGAT AGAATGGATT TCTTTTTGAA CCTAAACGTG TTAAACGAAT 60

TTTAACTGCC ATTTATAAAA TCTCCTTTAA GTCATGTTTT AATTTTTATT TTCTACAnG 119

25

(2) INFORMATION FOR SEQ ID NO: 2518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2518:

ATTCCTTTT AAGTTTTTAA AAATCCAAAA TCCTTGTGGT AGGGCCATGA AAGGGTTGGG 60

35

(2) INFORMATION FOR SEQ ID NO: 2519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2519:

ATAGAAGTGA AGCACGTAGA TTGAAACGAT GGTTAAATAA CGAGAGACAT TTAGAAAACA 60

50

ATAAAAATGA GGAATAATCA ATGATACATG GAATTGGTGT AGATTTAATC GAAATCGATC 120

GAATACAAGC GTTATATAGT AAGCAACCAA AATTGGTTGA GCGGATTTTA ACTAAAAATG 180

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GTAnAGCGGT CCGCGCTTAA AGCGCTTGCT AACITCGAAC AATGAATCTG CGGAACATCT 60  
 TGCGAATCCA CGAGATGATC TCATATGACG GGCAGCGAGG T 101

(2) INFORMATION FOR SEQ ID NO: 2513:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2513:

GGGTAATGTA ATAGTATTCA TCTACATCAT CTTGATCATC GTAATGCTGA TTGTACCCTT 60  
 CTAAATC 67

(2) INFORMATION FOR SEQ ID NO: 2514:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2514:

CCCGTCGTTT TCGTGnTTTT CGCGGCGTGT CTCCTGTTCG CGCCTCTACT 50

(2) INFORMATION FOR SEQ ID NO: 2515:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 275 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2515:

AAGAAAATAT CTCTTGAATA CTGATCGATT GCCATCGAAA AACACTGTTA AATCAAGTTG 60  
 CCCAGTCCAT TGTGTTCAT CCATTATGAT AATCCTTTGA GTAAAGTGTC GCGTTCAATC 120  
 CAATCGATAA CTTTCATCCAA ACCITCGTCG GTTTTTAAGT TAGTAAAAGT AAATGGACGT 180  
 TTACCACGAA ATACTTTAGT ATCTTCAGCC ATTTGTTCTA ATGATGCACC TACATAnGGA 240  
 GCTAAATCAG TnTTGTTAAT TACAAAGACA ATCTG 275

(2) INFORMATION FOR SEQ ID NO: 2516:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2508:

ACCTCCGCTT CAAATGTCAT TGATAGACAT TTAAAGCGGA GGCATGTACA TGT

53

(2) INFORMATION FOR SEQ ID NO: 2509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2509:

ACCCTATGAn AGATGAAGTn ATTAACCAAA AACCACGTGT TGTAATATTA

50

(2) INFORMATION FOR SEQ ID NO: 2510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2510:

TTAACCTATT ATATTAATTT TAGTATCAAT TCTTCTCCA GTTCCTGCGT CATTTTT

57

(2) INFORMATION FOR SEQ ID NO: 2511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2511:

ACGTGTTTCAT AACCCATAAA GGCGAATATG GTAACACCGA ACATCATGAC A

51

(2) INFORMATION FOR SEQ ID NO: 2512:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 101 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2505:

CCGTTAGTTC CATACCATAT TTTTCTCTAT AAAATAATTT AACATCTAAT TGCCTTTCTA 60  
 5 ATTTTTC AAT AGGGGTAGAT ACAGTTGACT GTGAATAGTT AAGTAACTCT GATGCTTTAG 120  
 TAAGGTTCTT TGTTCCTACTA GTTACTAAAA ATGATTTTAA AATGTTTAAG TTCAAAGTAG 180  
 10 TACCTCCTTT AGGGTTCCTT TTTATCGAAT CCTGAATTCT AAGAATTCTG ATTTAATAAT 240  
 AATATATnAn ATAT 254

## (2) INFORMATION FOR SEQ ID NO: 2506:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2506:

AACTCCACCG TG TAGTTGCG CTT CATCGCC TTGAGGATGC GATTGGCGCC GTGCTGCGCG 60  
 25 GCACGTGCAG ATAGTGCAG CACTTGGGCA GATCGCGCAC CGCCTCCAGC AGGTCGTCGG 120  
 TCATATCCTT GGGATAGTTC GTTACGAnTT GGATCCGGTC GATGCCGTCG ACATCCGAGA 180  
 TCGCGCACAG CAGGTCGGAC AGTCGCGTTG nCCGCTGGCA GTGTCGTAGT GGTAATGTTT 240  
 30 CACGGTTTTG ACCTAGCAGC GTTCACCT 268

## (2) INFORMATION FOR SEQ ID NO: 2507:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2507:

AAAAGTGGCT AATATCATCA GCAGAAATGTA TAACATAATC GAATTGCAAC CAGCGATTAT 60  
 45 ACCTTT 66

## (2) INFORMATION FOR SEQ ID NO: 2508:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

ATACGGGAGG TATCAGCACG TACGTGCAGT CGGTAATGGA TCnAAATACG

50

## (2) INFORMATION FOR SEQ ID NO: 2503:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2503:

ATCCCCACTC TTTTTTAAAT GATTTAACCA TATTTTATTT TTAAAATAAA TATCCATCAA 60

AGTGTATCAA TAAATTTATC ACATGTCAGA AAGTATGCTT CATCTGAATA CACCAATACT 120

CTCATGAAAC TTATTAAAAA TTAATCTCTC AACGTAAAAA ACCATTCAAA TTCATGAATG 180

GTTTGGAAGA ATGATTCATT GTTACGCTAT TTAATCACTA CATCTTAATT ATTGTTGCTC 240

TAAACGATTA CGCTTACCAT TTAAGAAAGC ATAAACGAGA CCTACAAAAA TACCGCCACC 300

GACAAAGTTA CCTAAGAAAG CAAAAACGAT ATTTTTTAAA ACGTGTAACC ATGAAACTGC 360

ATCAAGGGTA AAGAATACCA TACCTGCATA TAGACCTGCA 400

## (2) INFORMATION FOR SEQ ID NO: 2504:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2504:

ATTATCTATG AATAAAATTT ATAATAAACA TATATTGAGA AATTCTCTAA TACCTATTAT 60

TACATTTTTTA GGTGCTGATA TTGTAAGTAT TTTAGGTGGA GCCGTGATTA CGGAGACTAT 120

CTTTTCATAT AACGGTATCG GTAAATTATT TTTAGAATCG GTAATAGGCC AAGACTATCC 180

ATTAATGATG GCATTAACGT TATTTTCTC ATTTTtagGT TTAATGGGTA ATTTGATTTT 240

TGATATTACT TATGGATTTA TAGATCCAAG AATTAGAAGT AACTAGGGGG GATTAGAATG 300

CAAAATAAGT CAAAATCGCC TTnAAAAAT GCATTTTCTA AATTnATTCA TAnTA 355

## (2) INFORMATION FOR SEQ ID NO: 2505:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

- (A) LENGTH: 90 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2499:

10 TCATGATGCA GACGCAACAG CATTGTGTTA TGAATATGGA CAAATACCAC AGATGCCGGT 60  
 AGCATTTC AA TCAAGTAAAC CTTTAATAGA 90

(2) INFORMATION FOR SEQ ID NO: 2500:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2500:

25 TGCTCAAAGT CGTGTAGACA GCCAACTAAT GCATTTTCAA GATCAGTGAC ATCTCCGACA 60  
 CCAAAGAAAT CACCGAATAT TTTTGCATGT TCGATTTTAC CTCGTTTAAC ATCAAACCTTA 120  
 ATTTGTACAA ATCCTTTTTT AAATTTTTCC TCGCGTTCAA AGTTATATTT AGGGTTTCTA 180  
 30 CCATAATTCC ATTCCCAAGT TCTATATTTG TCGTTACTTA ACTTTTCAAT ATTTTCCCAA 240  
 TCTTCATCCG TTAATTGATA TTCTTCTACT TCAGTTTCGC CAAAGATAGT TT 292

(2) INFORMATION FOR SEQ ID NO: 2501:

35

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2501:

45 GGTGTGTGTA GAGGTCGAGA GTTGGGGGGG GAGTAACGTG GAAGTTGCCC GGACAGCA 58

(2) INFORMATION FOR SEQ ID NO: 2502:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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ATTAAGCTTT CTAAATCATT GATGTTAGGA GCTAATGTGC TCGATAAGCA GAGTAAAGAA 120  
 GAATTGCTTA AACAACTAA ACATATAACA GGTTTAGAAA ATCCTAATAG TCCTACACAG 180  
 5 TTATnGGCTT GGTAAAGGA TGAACAAGGA TTAGATATAC CTAATTTACA AAAGAAAACG 240  
 GTTCAGGAGT ACTTAAAAGA AGCAACAGGA AAAGCTAnAA AAATGCTAGA AATTAGATnG 300  
 10 CAAATGTCTA AAACCAGTGT GA 322

## (2) INFORMATION FOR SEQ ID NO: 2496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2496:

ATCAGTGTTA ATTCGCACGG AATTCCTTC CATTAAACTA ATCCGATCAT ATAATGGAT 59

## (2) INFORMATION FOR SEQ ID NO: 2497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2497:

CTAATTAAGC CAAAAGGGGA AGGGTCCACC AACCTTGGT TTCCCCCAT TGCCCGGAAA 60  
 CCACCAGnAA GTTTAAAGCT TCCCTTTAAG CCGTCCGATG GGTAGTCCGA ACTTTACCGT 120  
 TCCCGC 126

## (2) INFORMATION FOR SEQ ID NO: 2498:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2498:

CACTTTGCGC CAGTTTTTCAG TTGAGTGGCA TAGAGTCTGC TCATCAGTTC CTTGCTCC 58

## (2) INFORMATION FOR SEQ ID NO: 2499:



GACTGTTTTTA TCGCAACTAT TTACACCTAT ATTATCGTTA GTAGGACATC TCGTCGG

57

(2) INFORMATION FOR SEQ ID NO: 2492:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2492:

CATTGAACTT GCTTTTGACG TACACCACTA ATCAATGCCA TAATACGATC CGG

53

(2) INFORMATION FOR SEQ ID NO: 2493:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2493:

AATACAACATA ACATACACTT ACCCATGTCC GAAGTCCnTG TTGAGGAATG

50

(2) INFORMATION FOR SEQ ID NO: 2494:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2494:

GCTGTTTAGC TTGCTCAAAT GATGCATAAA TATCTGATGC AACTATCATA TCAGCTAGTT

60

CATCA

65

(2) INFORMATION FOR SEQ ID NO: 2495:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 322 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2495:

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2488:

AATTACATTA GCACCAATCC ACACATCATT TTTAATTGTT GTACGGCTAG GTTGGTCATT 60  
 5 AAAGTCTATA AACGTTTnCT TTAAGTTAAA TGGATTATTA TTTAGA 106

## (2) INFORMATION FOR SEQ ID NO: 2489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2489:

TGAATTTGCT TGAGTCGTGC TGCTGATAAC AATAAAATTG CACATGGATA AAGAATGACG 60  
 20 C 61

## (2) INFORMATION FOR SEQ ID NO: 2490:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2490:

GCTCGTATGA TACAAATTCA TAATCTGAAA CTTCTGTCGT TTGTCGAACA TGTGGTAACC 60  
 AATTCTTCAA GATGCTGTAT ATTTCTGCGT AATTTTCGTC ATTCCTGAAT AACCTCAACT 120  
 35 TTAAAATGTC ACCTTGTTTG ATATAACGCA TTAaaaaata TTGATCTATA TCTCCCTTAT 180  
 CTTTAAGATG TTTTACAAAT GGATACAAAT TGTCGATGAT AAATGTATCT TGCATGGCT 240  
 TATCGATATG AATATGTAAT GCAAACCACT CTTTGTGATA TTCAATATCT GTATTTTTAT 300  
 40 ATTTTGGAAT TTCGATTTG GGTCTCGAT AAGATGATTT TTTATAAATT GGTGTAACAA 360  
 TTTCATACAC ATGATCATT TTTGATTGAG GGAAAAATGA 400

## (2) INFORMATION FOR SEQ ID NO: 2491:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2485:

GACCAAAATT ATCTTTAGCA CTTATAGGTA TCTTTTAAAT ACTTTGTGAG TTTTCTATG 60  
 GCATTCCTTT TTTAGGTGCA ACGTTTATTT TAAGTTTGG ATGGCAGCCT TTACTCTTTA 120  
 ATGCATTACT TTATCTAATT CTTACTATTA TATTATTAGT GAATAGACAA AATGCGATTA 180  
 GACCTATAGC GATTATTCCA ATATTTGGTA TAGTAGGTAG TTTTITAGCT ATTATCCCCT 240  
 TCTTAGGAAT TTTGATTCAT TGGATTTTAT TTTTCCTAAT GATTCCAnTT GTCCTAGTTG 300  
 GATTATCAGC GCCAACCTAT ATACCCAATA AAAATGCTCG TGNChTTTTA CACACAATAC 360  
 AAAGATGGAC CTAGAG 376

20

(2) INFORMATION FOR SEQ ID NO: 2486:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2486:

TTGACCTTGA CGGAAACTTT TTTCCAAGTT CTAAAAGTGG GCCAAAATCT T 51

30

(2) INFORMATION FOR SEQ ID NO: 2487:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 103 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2487:

GAATTTTGGC ATACACATAC ACTTTAAAAG ATATTATTGA AATTACAGGT GTAACATAAA 60

45

GAACTTTACA TTATTACGAT GAAATAGGAT TATTAGTTCC AGn 103

(2) INFORMATION FOR SEQ ID NO: 2488:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 106 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

50

55

TACTATAGAA GAGAATGAGG CTAAAAAATC CAGACAGGTT CTCGTTAGTT GGAGTTTTGA 360  
GCCATTGAAA GTATTCTGGG GGCCAATTAA AACCGCCAAA 400

(2) INFORMATION FOR SEQ ID NO: 2482:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2482:

AAGGTGCATA GTCAACAACA TTACAGCAT CATTGATTC TGAACCTAAC GAAACATTAT 60  
ACTTACCG 68

(2) INFORMATION FOR SEQ ID NO: 2483:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2483:

ATGAGCCnAC ACAGTGGTGA GGTAATCAAC GGTACAGTGG TTAGTGTGAT 50

(2) INFORMATION FOR SEQ ID NO: 2484:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 213 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2484:

CGGAACCTCGT CGAATAACTT TTTAGATTCT TCGTTAGCTT TTACATTAGC GAATGCTTCT 60  
nTGATTGCTT TGTATTCTTC GCTTTCTCTT AAAGCTTGTT CTAATTGATT TGCATAATCA 120  
TATAAATTTA CTGCCATGGT TATAGCACTC CTTGGTnGTG ATGTTTATTA AAACGTTCTGA 180  
TATTACTTTA CCACATCTCG CTTTTTTAGA CAA 213

(2) INFORMATION FOR SEQ ID NO: 2485:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 376 base pairs

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2478:

TAGTTGCCGC TACGTTTATA CTCGTATTAA TGAAAAAAC TAGCAAAGAA TCTAAAAAAG 60

(2) INFORMATION FOR SEQ ID NO: 2479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2479:

TCGGACATGA TGGTAAAACC GTATTGGGTA TTCGCACTGA CACCTTAAGG GA 52

(2) INFORMATION FOR SEQ ID NO: 2480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2480:

TTCCTAATTA AGGATTAAAA AGGGTTTCCT AATTAGATTA nAATTCCGGG ACCTGGATGG 60

AAAAAAGTTT TTAACCTTTC CATCTGGTCC CGTTTTTTGA TTTTCGATAT AAAAAAGCG 120

CAATTATCTC TAT 133

(2) INFORMATION FOR SEQ ID NO: 2481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2481:

AAATGTTTTG GAAGAACGTA AGAnAAATCA ATCTGAAACA AATGCACGAT ATGAAGAAGA 60

ACAAGAAAAT TTAATGGAGC TTTTAGAAAA TATATCAAAT GAGATTTCTG AAGCTCAAGA 120

TACTTATAAG TCTCTGAAAA GTAAACAAAA AGAACTCAAT GCTGTCAATC GTGAACTTGA 180

AGAACAAC TA TATGTTTCAG ACGAAGCACA TGATGAAAAA TTGGAAGAAA TAAAAACGA 240

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2474:

CTTTAGGTGC TTGTGGTAAT TCTAATTCAC AAGATCAAGG TAACAAAACCT GAACAAAAAA 60

CA 62

(2) INFORMATION FOR SEQ ID NO: 2475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2475:

CCTTTAAAAT CATCTAGAAT ATCTCTGAG AAAAAATCGA AATCTACAGT 50

(2) INFORMATION FOR SEQ ID NO: 2476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2476:

ATAGTGGTTA GTCAATGTAA TTAAATGAGA ATAGAATGGT GATTTTCATCT TAGCTTGATA 60

ATTAGCAGAA TCTTTAAAGA AAATTTTGTC TTtCAAGCCT AAGTTTACAA CGT 113

(2) INFORMATION FOR SEQ ID NO: 2477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2477:

CGTAACTAAC TCAATTTACT GAAAAAATCG CTTGCGATGC AATAGCATTT G 51

(2) INFORMATION FOR SEQ ID NO: 2478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2471:

AGAGGTTATG TTGATGTGCT TTATTTTCAT CAATGTCATT AACACAATCA TATTTCTTCT 60  
 5 GTTAATGCAC TGTATTATAT TCAAACGCGC TATCGACAAT TAATTTGn 108

(2) INFORMATION FOR SEQ ID NO: 2472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2472:

GTCCCCAGTT GATATAGGAT CACAGTTTAA TATACTTGGT GAGATAGTAA TACTATTATT 60  
 20 AATTCAAATA GGTGGTCTGG GTATCGTGAC CGTAACCCTA TTGACACTAG TATTTTTTAAA 120  
 TAGAAAGATA TCAATGAAAA ATAGATTCTT GATTATGGTT ACATGGAATA TTGACGAACC 180  
 TGGTGGTGTT ATTAAGCTAA TTAAACACTT GGCTATTTAT AGTTTAGTCA CTGAATTAAT 240  
 25 TGGTATGATT TGTTTGTGTT TATCTTTTAT ACCAAAATTT GGTATAGGCA AAGGTTTATT 300  
 TTTAAGCTTA TTCACATCAG TATCAGCTTT TAATAATGCT GGGATTTGCC CTTTTTAAGA 360  
 30 ATAACCTAAT AGATTATTCT AGTGATCCAA TTGTCATTAT 400

(2) INFORMATION FOR SEQ ID NO: 2473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2473:

CTTCAAATAC TAAATCAGCG TTGCTAAACA TACCGTATAC ATTTGATGGC GTTGATAACG 60  
 CGTCCTGCGC TTCTGTTAAT AACTTTTCAG TTTCAGCATC TAAATATGA GGACGTTTTT 120  
 45 CATTAAATCAA CTTCAAATCA AATGCCA 147

(2) INFORMATION FOR SEQ ID NO: 2474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2467:

AGTTTGTTAA GTTTTAGTTT ACTAACTTTT CCATTAGATA TTATTAATGA AAAAC

55

(2) INFORMATION FOR SEQ ID NO: 2468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 76 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2468:

TTGTTGGTAA GGCACCTTCTT AAATATCAAC AACGCGATGA TATTTTCATT GGTACAAAAG

60

TAGGCAATCG TTAAAC

76

(2) INFORMATION FOR SEQ ID NO: 2469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2469:

CTTCTATAAT AAAACCATCT GCAATTAAGT CTTCAATAGA CGATGGATTT CTATTATGTA

60

TCAATGCATA C

71

(2) INFORMATION FOR SEQ ID NO: 2470:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 52 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2470:

CTTCGTCATT GTATTCGAGC GCCTGTATAG CTTGCTCAAA TGATGCATAA AT

52

(2) INFORMATION FOR SEQ ID NO: 2471:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 108 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double



CTAACATAAT TGTTAACACT AAAATATTTA CTACTTTTAG AACTGTGCGA TTAAATACAA 120  
 TTGTCAGTAT TGTTATGACT AGGCTAACGA TACATAAAAT AAAGAAACCG TTAAAGACTA 180  
 5 AAATTAAGCG ATCGATTCTT TGTTGTAAAT CATTGATATT ACCCAAATTA ATAnTTAATT 240  
 GGATGCATTT nCCAA 255

## (2) INFORMATION FOR SEQ ID NO: 2464:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2464:

20 TATGCGACAA TTCGAAACAT TTTATATGCA AAAGGTTATA CAACAGAGAA TGTTGATT 58

## (2) INFORMATION FOR SEQ ID NO: 2465:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2465:

30 TGAATTTTCAT TACCACATAT CGGACATTGA TCTCCAATAT TTACAGCAGA TTTAATTTCA 60  
 35 CTTAT 65

## (2) INFORMATION FOR SEQ ID NO: 2466:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2466:

45 CGTGACCTTC AAAGACCGAA CGAGAGAGTT GAAGAGCATT TGCGAAGGCC A 51

## (2) INFORMATION FOR SEQ ID NO: 2467:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55

## (2) INFORMATION FOR SEQ ID NO: 2460:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2460:

AAATCAAAAA AATGTATAAT GAAAAGAAAA AGAAATTGG AAAAAATTGG GAAGACGCTC 60  
 AAAAAGCTGG AAAAGCTGTA GGTGAAGATT TGAGTGTA TGG 103

## (2) INFORMATION FOR SEQ ID NO: 2461:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2461:

TTTATATCAG AATAGAATAG TAAACTAAGG CATTTGGAGA ACTTATTCCA TG 52

## (2) INFORMATION FOR SEQ ID NO: 2462:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2462:

CAGCAGCGAA TTTTGTACGT CCAGTGTAGA ATGGATGTGA ATCAGATGAA ATATCTAAAC 60  
 GAATAACTGG GTATTCTTTT CCATCTTCCC ACTCCATCAT TTCTGAAGAA GTT 113

## (2) INFORMATION FOR SEQ ID NO: 2463:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2463:

- (A) LENGTH: 65 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2456:

10 AGTGAAATCG CTAAAGAAAA AGATGGAACC TCGGTATCTA ATACACAACT TCTTGAACGT 60  
 TTTTA 65

(2) INFORMATION FOR SEQ ID NO: 2457:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2457:

25 TATCAATAAT TGCCACTTGC AATGACTGAT TAATTTGAGG TGCACATAAG CCAG 54

(2) INFORMATION FOR SEQ ID NO: 2458:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2458:

AATTTTATTT CGAGATTCTT CAATATAGAT GTTCTTCAT TAATTTGATT CTCTAACTCT 60  
 40 TGCTTACTAC CTAATAGTTT ATCTAATTCA GCTTTAGCTT TTTCAATTTTC TTTAATTATA 120  
 TTAATTTTCAT TATTTATGTT CGTnATCGTA TTATTTAGTT CGATAA 166

(2) INFORMATION FOR SEQ ID NO: 2459:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2459:

CCAATGATTA AGCAATACAA TCGTCACTAA AATTACACCG ATAATCTGAA TCATCGTCAT 60  
 55

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2453:

10 AGACGTGTTT CCACGGTATG GGATAAATGA AGCACCGACT GATAAATCAA TATAGCCTCG 60  
 TGTTTTTAGT TTACCCGAAC TATCCCTTGA TAATGATTGT GACATCTGCG GATAATATTT 120  
 CATTCTCTTA GATATCGTCG AAATATCACC GATTACTTGA AGTCCATCTG TCGTAAACAA 180  
 15 TTCAATTCTG CTTTGTGTGT TTTTACTTGG GCGGTATGTC ACTTCGGCAA TATATCGTCT 240  
 AACTTCAGGT GTCATTTTCA ATAACGCCTT AATCATATCA TCTTCTTTTG TACCTTTGAA 300  
 ACCATCCATG ACAGGTGCAT CATTAAATTTT GACATCATTG GAACCTTTAA GCAATTTACC 360  
 20 ATTTTCTAAT AAAGGTAAAT ATTTACCTTT ATATTTCACT 400

## (2) INFORMATION FOR SEQ ID NO: 2454:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2454:

AGAAAGAAAT ACCATTTGGA GATAGAGACT CGTGTTATTT CTTAGCGATG GGAGATTTTT 60  
 35 ATAATAAAGA AGATAGnAAG AAAATTATCA AAGGTTATGA AAATAATTAT GGTAGAGGTA 120  
 TTAATATTCC TCGAGCACAT AGTATATATT TATATG 156

## (2) INFORMATION FOR SEQ ID NO: 2455:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2455:

ACTTAGGTGA TATGAAATGT GGTCCGCGAC GATCGTCAGT AACAAAATAA CAGGCAGTCA 60  
 50 TTGGATTATG TTAAACG 77

## (2) INFORMATION FOR SEQ ID NO: 2456:

55

GCAGCCTTCA AGTGTGTTGCT ATTTGCTTTG GTGTCACAAG CCATTATCTA CGGTCCCGCA 60  
 ATTTAGCCCCG C 71

(2) INFORMATION FOR SEQ ID NO: 2450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2450:

TGGCGTGAGG AAAAATATCA TGTATTGTTA CACAGTCAAC AGTCTTACCA AATGATAAGG 60  
 AATGCTTTAA AAACGGATTT ATCACTTCAT CAAGTTCAAC AAATGATTGA TGTGCTTTG 120  
 TTAATTGAAC CGGGTATAGG AAGTGTATGT AATGCTTTTG ATCATATGTG GGGATATTTA 180  
 AAAAAATGTG CGAATGAAGA AGGAAAGACA ACAATCAAAA CTACTTAAAA GCTGATTTTA 240  
 TTTAATGGnA AAAATCGACA CCCCAACTTT ATTAGATTTT TTAGCAGAAC TTGCCTAATA 300  
 AATATGGAnG TCAATATTTA CTACAAAGCC GnGTTTTTAA ACCCCAAAAA G 351

(2) INFORMATION FOR SEQ ID NO: 2451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2451:

GTGTACCGCC TCGGCTGGCG TTCGCGGTGG GTGGTGCGGT CGGTGCGTGT CTGG 54

(2) INFORMATION FOR SEQ ID NO: 2452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2452:

TGCCATTCCA ATGTTACCAT CGTCTTGGTA CTACTATATA CTGCGGCTAT 50

(2) INFORMATION FOR SEQ ID NO: 2453:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2445:

AGCTGCATTT CTCGTGCAGG CTATCAGCAT CGATATCTGT ACCATTTAGT GATCATGC

58

5 (2) INFORMATION FOR SEQ ID NO: 2446:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs

(B) TYPE: nucleic acid

10 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2446:

15 AACCAAACA AACATTTGTT CGTTAAATA TTGACACAGA ACATAAGTTC TGA 53

(2) INFORMATION FOR SEQ ID NO: 2447:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2447:

CACAAATTAC ACCCATTGTT AntACTAATA CTnCCnTT CATTGTTTA 50

30 (2) INFORMATION FOR SEQ ID NO: 2448:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 75 base pairs

(B) TYPE: nucleic acid

35 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2448:

40 GCACAAACCA AACGCACCTT AACTGCTTTA AATGGCTGGA CGGGGGGTCA ACTGGCCTTA 60

ATGACACTTG AATCG 75

(2) INFORMATION FOR SEQ ID NO: 2449:

45 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

50 (D) TOPOLOGY: linear

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2442:

GTGTTGGGT GTGTGGTTTT GGGTGTGTG GGTGTTGGGT CTGGGTTTCGT TGGTGG 56

(2) INFORMATION FOR SEQ ID NO: 2443:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2443:

GAGACAACT AGTCGTCCAG AACGGAATTT AAGTAATCAT AATAATTACG GAAGTGCACT 60

TTTGTTTTTG ATTTATCATT GATGGAAATT AGAACAATTT ATCGAATGAT ATTAAAATTA 120

CATAACATCA TGTTGAATGT GAAATTAGGA TTGAACATTA CCTGTTTATT TGAAAAACCT 180

TCAGTTTTTA AATCACTAGT ATCACAAATA AAGCGACTTA AATTCGATTC GTTAATAATA 240

GATAATGCAA ATTTAnGTAG CCCT 264

(2) INFORMATION FOR SEQ ID NO: 2444:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2444:

CCGTCTTTAG TACGTACGTT GTTTGCGGGG CTTGGGGTGC TTTCTGGGTG TTGGTCATTG 60

TATTGGG 67

(2) INFORMATION FOR SEQ ID NO: 2445:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AAGATACGAT TTTGAGACCA TGTGAAGGGA TTAAATATAG

400

(2) INFORMATION FOR SEQ ID NO: 2438:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2438:

TCTGTTTTGA AAGTTGCAGT TTGGACAGCA CCCGATGATT AGGTGAGTCT TTTGGTTTA

59

(2) INFORMATION FOR SEQ ID NO: 2439:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2439:

TTGGTnAAAC CGTTACAGTT GCAAGTTTTG AAGTGAGTTA TTTTTTGGTT

50

(2) INFORMATION FOR SEQ ID NO: 2440:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2440:

ATTAAAAATA AATTAAAnGT TCCAGAACCA GTTAACCAGA ATATTTACGA

50

(2) INFORMATION FOR SEQ ID NO: 2441:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2441:

TGCTGTTTTG GCGGTTTTTC TCCGTTTGGT TGAGTATGTG GTGTACCTTT TGTC

54



TTAAACGTGT CTTTAATGTG GAAGTTGAAA TATTAGTCCG TAAAAAATG AAACCTTAAAA 60

AAAAATAATA TTTATATTTG TCGTACAAAG ATGAAAGCGA nAGA 104

(2) INFORMATION FOR SEQ ID NO: 2435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2435:

TTTGCTAATC GTTTCACGGA TTGTGGGGAT GGGTAAAGAC TTTGCTAGTG G 51

(2) INFORMATION FOR SEQ ID NO: 2436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 140 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2436:

AAAnTTAATT TTTGGGGGGC CCTTTTTTAA CCGGAAAATC CAATCGGGGC TTTTAAGGAA 60

TGGTTTTGGT TAACAGGCTT TGAATTTGG TTTGGCAAAA CAATCCTTGG TTTGGGGTTT 120

CGGTCCGGAG GGTCTAATT 140

(2) INFORMATION FOR SEQ ID NO: 2437:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2437:

GAAGCGGAAC CACCGTTGTT TTTCTTTTCA GGTCCAATTG AATAAATGTT ATGAATAGAA 60

TGGATAAAAA TATAATTATT TAAGTGTTAA AGTAAACCAA ATCATGATTT AAGATTATAA 120

GAAAGAAAAA TTGACTAATG TTAAGACCAA CAATCATATG GGTGTAAACG TTTATACAAT 180

CATCGTAAAA CTCAATATGC TTAATTTATT CAAAATGTTC GTCAATAAGT ACAATGAAAA 240

GGAGATTGAT TTTTGAATAA AAAATATCTT ATGATTGTAA TTATAATTTT AATATGATTC 300

## (2) INFORMATION FOR SEQ ID NO: 2431:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2431:

TGACTTCGTC CAAGTACAAC TGCAGTCAGT ACCTACGAAA TCAAGATCAG CATGGAT 57

## (2) INFORMATION FOR SEQ ID NO: 2432:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2432:

ATTCTTAATC GCATCATAAT TAATTAACGG ACGCATAACA AATCCGATAA TACTATTATC 60  
TTTCCAAGTC ACTGACACTC CAAATTGATT TGCTTCnTCT ATCCATATTT GCTCAATAGT 120  
ACCATCATTT TGAGTACACA CTTTAAATTC ATGTACATCA GACTGCCTTG TATAAGATTT 180  
GAAAAGTTTC CTAAACTGCC AATAACTGnA CTCTCGCTTC AAATT 225

## (2) INFORMATION FOR SEQ ID NO: 2433:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2433:

CGGCCTGACG TTACATTTCT TCAACTTCAC GTCAAAATTG CTTGCAATA ACCAGGA 57

## (2) INFORMATION FOR SEQ ID NO: 2434:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TATCCACTAA AATGATTTCG GCGTATTGTA ATATTAATCG TTCTACTTTT TATGATTATT 120  
 ACAGGGAGCA ATTTGATTTA TTGGATACCA TCAACTCnAA GCATAGGTGG AGG 173

(2) INFORMATION FOR SEQ ID NO: 2428:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2428:

TACTTATGTT TATGTCGCAA TAATTAATGT TCGAnTTAGT GGAATTGAAC 50

(2) INFORMATION FOR SEQ ID NO: 2429:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 68 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2429:

AGTCATCATA TTATCAATAA TACGCCGCGT TAAATCTGAT AAATTCATAT AGTCTGTATC 60  
 TAACTCTG 68

(2) INFORMATION FOR SEQ ID NO: 2430:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 374 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2430:

TGAATTGAAA ACGGTCGGTG AAGCGCTAAA AGGTAGACGT GAAAGGTTAG GAATGACTTT 60  
 AACAGAATTA GAGCAACGTA CTGGAATTAA ACGTGAAATG CTAGTGCATA TTGAAAATAA 120  
 TGAATTCGAT CAACTACCGA ATAAAAATTA CAGCGAAGGA TTTATTAGAA AATATGCAAG 180  
 CGTAGTAAAT ATTGAACCTA ACCAATTAAT TCAAGCTCAT CAAGATGAAA TTCCATCGAA 240  
 CCAAGCCGAA TGGGACGAAG TAATTACAGT TTTcATAAT AATAAAGACT TAGATTATAA 300  
 GAGTAAATCC AAAGAGCCAA TAcnATTATT AGTAATCATG GGnATTACAG TTTTAATAAC 360

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2424:

10 AGTCCTTTGG ATCGTCAAGA TTTCACACAT TTACAnTTAT TAnCTCGTGA 50

(2) INFORMATION FOR SEQ ID NO: 2425:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 248 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2425:

ATGTAATATT ACAATTCAAT TAGnAAAGAA CTTTATCTTT AATTGCTTTT CGATTTTCATT 60

25

CATGTCATCT TCTGAAATTA TTATCGTTCC AGTAGGATCA GAATCATTTA TTTTGCTTAT 120

ACGTCTTTTG CTTATTGTTG TAATTGCTGA TATATTAACG TATGTATCTT TCCCTTTGTG 180

CTTGGAATAA ACACCTATCA CTCTATACAG TTCATTAGCT TTTTGAnTTA AGTTAGACAA 240

30

AAGCTTTT 248

(2) INFORMATION FOR SEQ ID NO: 2426:

(i) SEQUENCE CHARACTERISTICS:

35

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2426:

CCTTATTATA TGACAGGTTG CCTAAACAAG TGCCTAGAGA AAAAAGTAGC CCC 53

(2) INFORMATION FOR SEQ ID NO: 2427:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 173 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2427:

55

## (2) INFORMATION FOR SEQ ID NO: 2421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2421:

ACCAGAAGAC AATAAGTGTA ATGATGCCTG TTCTAATACA GAATCTTTAC TTTTATTGC 60  
 CTTTTCAAGT CGTTGTTCCA CTTTCTTAAT TTCATTGTTT ATGTTTAACT TTGCCAnGTT 120  
 AATCACCTTT GGTATTATCT TTTTCTTTAT AG 152

## (2) INFORMATION FOR SEQ ID NO: 2422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2422:

GTACGTTTTT ATTAGTTGTT ATATTTCCAT CTGATAATT TTTTAAATCT TTAAAATCAG 60  
 CATACTGACT AAAAAATTTA AAATTTTCAA TTTTTTGThT AAGTTTTTGT CTTCTACATT 120  
 ATCCAAAAGA ACAATCTnAT TATTTTTTAG TTCAACACGA TATTTTTTCT CATTATGATT 180  
 TTTGCTAATA TCATCATAAA CTTTATTTAC AAAATAATAA CCTGTTGCCT TTTTGGTATT 240  
 TCTATTAAGA TATAACACCA TGCCTTCATC ATCTAATACT CCTGGTTTGT TACTTTTTGA 300  
 AAAACCTn 307

## (2) INFORMATION FOR SEQ ID NO: 2423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2423:

ATTGTGTTGT ATTTTAGACA AGACCTTCAA TTTTGGAGAT TTCACGATTT ACCACC 56

## (2) INFORMATION FOR SEQ ID NO: 2424:

TTTGCTGGGA GTTGCAATTA GAAAATATAC ACATTTACTT GACATTCAAC TTGATAAAAA 60  
 ATTAGTTATT GCCATATGTT GCATCACATT TATAGGGATT TTAATATTTT ATGTACGCCT 120  
 5 AATTAAAAAA TCATCTTTAA ATATTTATAA TACTAAAAAT AAAAGGTCAA AAATnTT 177

(2) INFORMATION FOR SEQ ID NO: 2418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2418:

AAAATGAAGC GGTCGCAAAA TATAATGACG TGAAAGCATT TTATACTCAT GGACATTTAT 60  
 20 ATCAAGTCAA TCGAACAAGA GATTTATTAG CTGAAAAAGG ACTTGAATTA GGTGTTTGT  
 TTGCATTTTA TGGACATACA CATGTGGCAA AATATGAGTA TATTAATGGT GTTCATGTTA 180  
 TTAATCCTGG AAGTATATCT CAATCTAGAA GTTCAATGGA AGAAACATAT GCTGAAGTTA 240  
 25 TTATTGATGA TCAAACTTTA CATGGCACCA TCAATTTCAA AAATCGACAT CACGAAACAA 300  
 TCAGTCATAC TACTTTTTTAA ATAGAAATAG CTATGGCTTT TTTTAGTTTA TAGACTGATT 360  
 TAACTAGGAG GTCGTGTCAT CCAATGTTTG TTTAAAAGTA 400

(2) INFORMATION FOR SEQ ID NO: 2419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2419:

AGGGTGCCGA GTTAACCAAG AAAGGCCGTT GGTTGCCCCG GGTATTTTCC CCC 53

(2) INFORMATION FOR SEQ ID NO: 2420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2420:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2414:

10 GGATAGAAAT GGGAATCCAC CCATCGGTGG GGGTACCAGG CTCTTCATAT GGCCTTGTGG 60  
 ACTTC 65

(2) INFORMATION FOR SEQ ID NO: 2415:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 267 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2415:

25 TTAAATAGAT AGAATAGAAT TAAAGAGACG ATGATAGGTG CTGCTATCGT CTTAAAAACG 60  
 ATGATAAAAG GATCAAAAAC ATATGATACT TTTTCGAAAA TAAAAATAAC AATACCCAAC 120  
 AATACTAGCG CTATTAATGA GAAGACTAAA TCATTCCCAC CAACAACTT CATATACCGT 180  
 30 GATTCGGTAA ATTTTnnAAA ATTCTTTCTT ATATTCTTTT CATTTTCATT CAATTATAGA 240  
 TTCACCACCA CTTAAATAT TCATAAG 267

(2) INFORMATION FOR SEQ ID NO: 2416:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2416:

45 TTAAACAAAT GAATATAGTA GTTCCATTAT CCTCACTTTT AATCGTTTAT 50

(2) INFORMATION FOR SEQ ID NO: 2417:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 177 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2410:

CCATATGATT GTATAGGATC CATGACGTCT CCACTGACCC CTGACTCTAG TATC

54

(2) INFORMATION FOR SEQ ID NO: 2411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2411:

GTCCTCTTC AATTGTTATA TGTATATCAC AAAAATTATT TCATTATTTT ACCATTATTA

60

TTTTACAAAT ATTATCCCAA GAATACAATT CAAGAAATGA TTAACCTTAC TTTAGAATTG

120

TACCTTATTA CATTATTTAT GAAAGTACTC TCTCAATTAT AACnAAAAAG AAGGTGTTCA

180

ATACATnCAT ATTTAGTCTT ATAT

204

(2) INFORMATION FOR SEQ ID NO: 2412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2412:

CAGTGGCGCA GAAACATAAC GCTCAGGGAA GCACAGCACC TCATTATGCC AAAGCT

56

(2) INFORMATION FOR SEQ ID NO: 2413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2413:

TCGCTGGCGG GTCCCGCGCG CCTAGCGTGC TCATGTGCGG TGTTCTAGGT GTTGGGGTTG

60

CAGTCA

66

(2) INFORMATION FOR SEQ ID NO: 2414:



GTAGTATCCA ACGTATTTTCG GATTGCATCG AGTTGATTTT TATTATTTTC TTCAATGCTA 120  
 TCAAGCGCAn CTGTATTACG TCTTACTTTA GGTTTTATTT GCTCTATTGC CTTGATTGTT 180  
 5 TGATnTCTAA CATCAGTAAC AGCAGCATCT TGATTGTAT TGTCTATT 228

(2) INFORMATION FOR SEQ ID NO: 2407:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2407:

CCTTTCGTCT CGCGCGTTTC GGTGATGACG GTGAAAACCT CTGACACATG CAGCTCCCGG 60  
 20 AGACGGTCAC AGCTTGTCTG TAAAGCGGAT GCCGGGnAGC AGACAGCGAT 110

(2) INFORMATION FOR SEQ ID NO: 2408:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2408:

GGAGACCCCA AAAATTTTGT CGTTGAAGAT GCCTTTTTTTT AAGCGTTATT TGGCTATATC 60  
 35 AGTTTCTAAC TGT 73

(2) INFORMATION FOR SEQ ID NO: 2409:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2409:

AAATCATTAG AGAGGAATAG TTCCCTTTGT TACGCCAAAG ATTCGATATT GAC 53

(2) INFORMATION FOR SEQ ID NO: 2410:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2403:

10 ATTTAACCAC TCCTCCAATG ATAAGATTGA AAGGCAAGAT GACCTTCCAA TCTTATTT 58

(2) INFORMATION FOR SEQ ID NO: 2404:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2404:

CAGCTTCTAC AATACGGCGT GCTATAGCAA GCATTAATGT AAATCCTAAT TCTGCAGTTG 60

25

T 61

(2) INFORMATION FOR SEQ ID NO: 2405:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2405:

AATAATCATT TTAATACGGT CTTCAAGGAAT TGAAGTGTCT ACAGGTACAT ATCCACATCC 60

40

TGCTTTAATG GGCACCAATC ATCCAACAA TCATATATGG TGACATGTGA CCGAATAAAA 120

TCATCGGGTT TCTACTACC TTGTAATCGA TGTGGCTAAT TTAGTAGACT CATCCATTAA 180

CTGTTGATAA GTTAATTCCA TCAGTTGTGT GTCTAAC 217

45

(2) INFORMATION FOR SEQ ID NO: 2406:

(i) SEQUENCE CHARACTERISTICS:

50

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2406:

55

TTTGATGCAC TTATTTGTGT AATGACATCT TTACAGTCTT TTCCTTCCTC CATCATTTTA 60  
ATAATTCCAT TTAGTTGCCC TTGTATTCTA TTAATACGAT TAATCATTTT n 111

(2) INFORMATION FOR SEQ ID NO: 2400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2400:

AAATGCTGGC TGAGTTTTGG GCCACCCGCA AAGGCACTGG ACCGGTGCGA AACC 54

(2) INFORMATION FOR SEQ ID NO: 2401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2401:

AACCACTCAT CACTACTAAA ATGATACTTA AAAACAAAGT CTTAATACAC TTTTTCATAA 60  
TATCAACTTC TTTCTATATT TAATACATTA ATTATACATC TTTnTnAAAT AAAAATATGT 120  
GTAAAATTTT AAAACTTATT TAATTGATGT TTTAATAATG TATTATAGAA ATTATTGACA 180  
TATGATTAAA AACCCCTTAGG ATAGT 205

(2) INFORMATION FOR SEQ ID NO: 2402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2402:

AGATAATCAT AGAGAAAGTC CACAGTCGGT AGAGGTGGTA GCTGAAAACA ACATACTATT 60  
AATTATGAAG TGCTTTGTAA CTTGTCGAGA CGTTTGCCGC GAATCTATCA TGATGGTGAT 120  
CAACGTTTTG TnACAAATGA 140

(2) INFORMATION FOR SEQ ID NO: 2403:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2396:

GTTTTGAATA TAGGGGCTTT TATCACTCTC CGAAGTCTnT TCTAAGTTAG ATTTGGAAAA 60  
 TAACACTTTT TTAGTTTCAT TCAAGCGAGT CGAGTGACTC CAGA 104

(2) INFORMATION FOR SEQ ID NO: 2397:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2397:

GATTATCGAT CACAGTATGA TTTACGTAGC AATTTCTGGT ACATATACGC CTAT 54

(2) INFORMATION FOR SEQ ID NO: 2398:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2398:

GCTTCACCTT GAACTAGCAA ATAAGGATAA AACAAGCATT CTTTACATGT TTCTTTTAAA 60  
 TACGTTTGAT ATTTTAATAA TACTTTTTTCG ATTTTACTCA TATAAGTTTG AAGTTCTAAT 120  
 TTTTCATTCT CACTTATTTT GTATATATTA CATTCAATTAT GTTCTGTCAG AAAAATATAA 180  
 GGGTCAATAT TAATTTTCGTC TATCAATTCA TAAATTTTAC TTAAGTATTT nTnCT 235

(2) INFORMATION FOR SEQ ID NO: 2399:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2392:

GGTCGGAnTC CCGGGTCGAC CCACGCGTCC GCATCAACCT AGnAGAAGCn

50

(2) INFORMATION FOR SEQ ID NO: 2393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2393:

ATTTCCAAAC GAATTGAAAA ACGGACGTAA ATTCTTAACT AAAGGCGATA AATGT

55

(2) INFORMATION FOR SEQ ID NO: 2394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2394:

ATAGGTTGCT ACTATTTATA TCGACTCATT TTCACCTACA AATATGACAT TGTCTCTAGA

60

ACACnAAAAT TAATTTGCGT CATATCTGCT ACAGTTTTGA GTGTGTTATC AAGTGTATTT

120

(2) INFORMATION FOR SEQ ID NO: 2395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2395:

TGGACCATAG TAAAGCATT ACGTCGGTTT ATTATTTTCT AAGGAAGTAT GTTTATATAA

60

ATCTATGCTC ATTTGTTTTT TAGCGTCTGT TTGACCTATT ATTTTAGAAC CAGCCATCTG

120

CTCTTTATAA AAATTTATTA CATCATCTTT TTTTAATGTT GTATATTCAT AGTTTATTTT

180

TATTATnTCA GAATCGTGAA AACTATTTAG TGATTGAnAT ACTCTTTTTG GAGGATTCTG

240

AATATAGATT TTCTTAATAT T

261

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2388:

ATATAACATT GTAGGGCCTA ATAATTTATT TTATGTCTCA GACTCATACA ATGGTTATTT 60  
 5 AACTTATTTA CCACAAATTG AGCACTAAGA CTCACTATTA TCGATTCTTC TATTGAACAn 120

(2) INFORMATION FOR SEQ ID NO: 2389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2389:

TCTAAATCCA GCATGATCTA CATCAAAGCT GAATTCACCT TTTTCATCGA CTTGCAAATC 60  
 20 AGGGAATTCT TGACCTTCAC CTAGT 85

(2) INFORMATION FOR SEQ ID NO: 2390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2390:

GGTGTTTATA AAGCAGGGGC TGAGCCTCGG TCAGGACTGG ATACACAGGC AGTACGGGTG 60  
 35 A 61

(2) INFORMATION FOR SEQ ID NO: 2391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2391:

TAAAGTAACC ACTTTAGATG ACATTTTAGA AGTTATGGGC CGAATGCAAA C 51

(2) INFORMATION FOR SEQ ID NO: 2392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

TATACAGAAA ACAGCGTGCC GTTATCCATT ATCACATGAC ATATGTAGTC C

51

## (2) INFORMATION FOR SEQ ID NO: 2829:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 68 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2829:

GAGATACGGT CTTCGTATAT GATATGTGCA TATTTAGATA GTCATTTATG AGAGAACGTG

60

GACGTGAG

68

## (2) INFORMATION FOR SEQ ID NO: 2830:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2830:

TGATGATTGT TTATGATACG ATATGTAAAT GATAATCATC CAGGAGGTCT AGCATGGT

58

## (2) INFORMATION FOR SEQ ID NO: 2831:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2831:

CCTAACAAAC ATAATTAAAC CCATAAATGC ATCCAATGCG GTTAAACCAT GAAA

54

## (2) INFORMATION FOR SEQ ID NO: 2832:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2832:

## (2) INFORMATION FOR SEQ ID NO: 2833:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2833:

GTCTGCTACC CTTTCAGAGC AACATGCTGA GTGTATAATG CCGTGTATAG GGGACAATGC 60  
CATTCACTA 69

## (2) INFORMATION FOR SEQ ID NO: 2834:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2834:

AACACCAGCT GGTAAGTATC ACGTTACATT TTGTGTCTTC ATGATTAATA AAAAC 55

## (2) INFORMATION FOR SEQ ID NO: 2835:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2835:

AGAGCTTGGA TGTCGTTTCGT AATTGATGCT CTAGCTCCAT GGGGCCCCATG 50

## (2) INFORMATION FOR SEQ ID NO: 2836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2836:

TTTCGTCACT ATTGCTCATG CATAGACATT TGCAATACCG GCAAATGACG ATGGnATATG 60



TTAATGGTCA ATACAGGG

138

## (2) INFORMATION FOR SEQ ID NO: 2837:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2837:

GTTGGCAACT TCAGTCGCTA CTTTAACGCA TCTCACAGTC CTCCTCCCAA AGAGAACGTA 60  
T 61

## (2) INFORMATION FOR SEQ ID NO: 2838:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2838:

ACGTGAATCC CGTGAGGCCA ACAGTGATTT GGATAATTAC ATGGATGTTT GACTAATGGT 60  
CATTACACCC CAGATCAG 78

## (2) INFORMATION FOR SEQ ID NO: 2839:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 90 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2839:

ACTTAAAATC TCCTCTTGCC TAACTTCCAC ATTCTTATCG ATATGAATAC ACCATACGTT 60  
TTATAGATAA GTTGATGTTG ATGCATATGT 90

## (2) INFORMATION FOR SEQ ID NO: 2840:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2840:

5 TATATTTAGT CTGTTATACA AGGTGTATCA CAGCGGTAAT ATGCCTCTAC ATGGCCATAT 60  
G 61

(2) INFORMATION FOR SEQ ID NO: 2841:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2841:

GGGCCCCGGC GGCAGGGAGG AAGGGGGCAA GGGCGGCGCC AAGACCACGA CCGGCACC 58

20 (2) INFORMATION FOR SEQ ID NO: 2842:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2842:

30 TGTACAGGTG CAGTTAGACC GCCTGACGGA ACGAGACGTG CAATTGCCAG CAACGCACAA 60

(2) INFORMATION FOR SEQ ID NO: 2843:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2843:

AAACATGTGA AGTGATCGAG GTATGGACGG AGTAATGATC GCACAAGACA TAGCATCCCC 60

45 GT 62

(2) INFORMATION FOR SEQ ID NO: 2844:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2844:

ACGATTTAGT TTGAATTTCT ATTAGGGTTT GGTGATTCTA CTACTTCTGA TA

52

(2) INFORMATION FOR SEQ ID NO: 2845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2845:

GATTATCACA ATTATGCAAA GTTGTCTAAT CGTTAGACCA ATTTCTGTTC AAACACCACA

60

ATC

63

(2) INFORMATION FOR SEQ ID NO: 2846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2846:

CGTTATATAA GAnCGACATG GAAGCATGAT GAAATATTGA ATACATCATA

50

(2) INFORMATION FOR SEQ ID NO: 2847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2847:

CCACAGGTGC ATCCGCCTGG TATGGAGCCG GCCAGTCTTC ACTGCTTTCA C

51

(2) INFORMATION FOR SEQ ID NO: 2848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

AAAACTGTCC CAAGCTGTTT TTATTTAGAG CAACCAATCC AATTTAAACC CCCCACCATT 60  
ATTTTAAATA ATACCATTCC AGCGAAAGCC CTTTCCAnGG TTTTGGAATA TAA 113

5 (2) INFORMATION FOR SEQ ID NO: 2849:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 155 base pairs  
(B) TYPE: nucleic acid  
10 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2849:

CATCTGGAAC TTTTAAATTC CAGAAGGGTT CCAGAAGGTT TCGAAATCCC TCCTAATGGG 60  
CTCCATTAAAC GGATTTTAAA TTTTAAATA ATTTTAGGCC AAAAAATTAA TTTCCAGGAA 120  
20 AAGTAAGTTT CCAACCCGGG TAAGAAATTA CnAA 155

(2) INFORMATION FOR SEQ ID NO: 2850:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 64 base pairs  
25 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2850:

CACAACTAA CATAGAAGGG CCATCATCAG GTGCTATTAA ATATCTACGC TAGATTGTAA 60  
ATCA 64

35 (2) INFORMATION FOR SEQ ID NO: 2851:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
40 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2851:

AATTATTCAT CAATAGCTCT TTACGATTCA CAAATCTAGG TACTTTTCAG ATCT 54

(2) INFORMATION FOR SEQ ID NO: 2852:

- 50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2852:

AAGCCCCTTT AAAGTGGGCC TTAAAGGAAC GGTGGCGAAA ATCCCCAAAT TCCGGGCA 58

(2) INFORMATION FOR SEQ ID NO: 2853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2853:

AAAGGTTTCC ATTCGGTCCC ATTAAGATTT TTTTGGAAT TCCATGGAAG GATGGTTGGT 60

CCTTTAGGCC TGGTAGGTTA TCCTTTTTGn AGGTGGTATC CAG 103

(2) INFORMATION FOR SEQ ID NO: 2854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2854:

GGCCACGGTC ATTCCTCCAA GCCAACCAGT GGACAAGATG GGTGGAAGGC GCAGG 55

(2) INFORMATION FOR SEQ ID NO: 2855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2855:

TATTTGGCAT TCAAATAACG TAAACGGATT TTGAAGTAAT TTACATAAG AGG 53

(2) INFORMATION FOR SEQ ID NO: 2856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2856:

ACAATTTGAC AATGACTGGG ATGCTGACAC TTGATATGAA GACAATTGAA GAT

53

(2) INFORMATION FOR SEQ ID NO: 2857:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2857:

AACTGCGTTA CATGCTTTCG TTTTAACTGA ACCCAGAACA ACGGTTTCGG

50

(2) INFORMATION FOR SEQ ID NO: 2858:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2858:

CTTTnnTAnC TTCATCTCTA TTATTATTGT CCGAATTACT ACGTGGACAA

50

(2) INFORMATION FOR SEQ ID NO: 2859:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2859:

TCCAGGTCGA ATTTATTGCC AATTAGCCTC CCGGGTTAAA AGGGTGGGTG TCGGGTAAAA

60

TCGTAC

66

(2) INFORMATION FOR SEQ ID NO: 2860:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 72 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

GGTATCCAGT CCCCCGGAGG GGTGACAAAC TTCCACGCCC AGTGGGGGGA CTACCGTTTT 60  
GGACCAAAGC CC 72

5 (2) INFORMATION FOR SEQ ID NO: 2861:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 58 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2861:

AGTGTCGAAC AATTAAAGAT ATTGAGTGAC AGGATTGCTT AAGGGCCGGT CGGAACAG 58

(2) INFORMATION FOR SEQ ID NO: 2862:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
25     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2862:

TTAGCGGTAA ATCCGAAGAA CTAAGAAGAC GTCAAGAAGG GGATATACGC 50

30 (2) INFORMATION FOR SEQ ID NO: 2863:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2863:

GCAAAAATGA GAGCTCAATC TGCATTAAGC AAATCAACGA AAGATTAGGT 50

(2) INFORMATION FOR SEQ ID NO: 2864:

- 45 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 246 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
50     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2864:

AACTATTCTG GATTTGTGCA GTGGCTATGG GGATGAGTGC GTTCCCCTCT TTCATGACGC 120  
 AGGCGAACGC CAGCAACGCA ACCACTGATC AATGCTGAGC CAGCTGTAGC CGCCCAGACG 180  
 5 GAACAAAATC CGCAGTGGGG GCAAGTGATG CCGGGCGTGC AnGGCGCTGA TGnCAGTTCTG 240  
 TGGCAG 246

(2) INFORMATION FOR SEQ ID NO: 2865:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2865:

20 ACAGATGATA CCTCTTGATC ACTTGCCAGA GATCGTCTAA GTCGTCCTTG 50

(2) INFORMATION FOR SEQ ID NO: 2866:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2866:

30 AATACCACGC TGACCTTAAT AAGCCATCAT GGGGGAAATC ATGACCGCAA T 51

(2) INFORMATION FOR SEQ ID NO: 2867:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2867:

45 CAACTTGGTA AGTGGTCGTT TTGGGCCCCA CCCTACCCGT TTGGACCTGG 50

(2) INFORMATION FOR SEQ ID NO: 2868:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2868:

CCCAACCCGG TTCCGGGCCT TAATTTTTTn CCTTTTAAAG GAAAAAAGG AAAAACCGGT 60  
 5 TAATTCGGC CCAAAAAnCC CGGAAGTTGG AAACCTTTTT TTAATAAAAA TAATGGACCG 120  
 TCCCAACCTT TGTTGCCAAA AGGTGGCCTA AAGGTTTAAA AAAAACCGTT AAAATCCATG 180  
 10 GCCAGGATCC AGCCTAAAAT TGAAACCATT ATAATTGATA AAC 223

(2) INFORMATION FOR SEQ ID NO: 2869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2869:

TGGACCTTTG GTAATATGAA TTGAATGGTG CTTTGTGGAA ATCGGGAATT CGCCTCGTGC 60  
 CTTGTA 66

(2) INFORMATION FOR SEQ ID NO: 2870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2870:

AAnAGCCAnG ATCATGGTAT ATCCATTAAG AGACGAGAAG ATCGATGCCC 50

(2) INFORMATION FOR SEQ ID NO: 2871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2871:

TTATTTGGAC TTACAAGGAG AATAGTCAnT TCTAGGAAAG TGGTGCGAAA GTCACCTTACC 60  
 55 AATATACGGG GATTATTCAT CCATCGTCGG TCGGTCATAT GATACGGAAT TAACACGCCA 120  
 CTCCG 125

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 62 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2872:

CAACACCTGA CGTGTATAGA ACTCATCTCT TCAATAACGT CGCTGTCAGG TTACGAAGTC 60  
GA 62

(2) INFORMATION FOR SEQ ID NO: 2873:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2873:

TATACATTCC ATTTAACACC TTAACACATG CAAGTTACTT CCTCCTCAAG CATC 54

(2) INFORMATION FOR SEQ ID NO: 2874:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 56 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2874:

GCTGAAAGGA GACTTCTGCA GGTGTGATCA CAAACTGCAC ATCTACACAA GCCATT 56

(2) INFORMATION FOR SEQ ID NO: 2875:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 112 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2875:

AGCGCGACCG CGAGAAGGGA GGGGGAGCCA GAGCAGCAGC AGGCCCCAGG GCGAAACCCC 60  
CAAGAGGAGC GAGnAAGAAG GAGGGAAAGC CCAGCAGGGG CGCCCAGGCC AG 112

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2876:

GnGCGTTnnA nCGGTCGCGT AGAGATGTCG GGTCTGTAGT AGATCTGGGG

50

(2) INFORMATION FOR SEQ ID NO: 2877:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 68 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2877:

ACCTTGACTT TGCAGACGAT GATGCTTTTG GCTGGGATCT TCACCATCTG GCAACTGAAT

60

ATGGTTGG

68

(2) INFORMATION FOR SEQ ID NO: 2878:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2878:

CTCCACCTGA TGCATGCCCC CATATCAGGA AAATGATAAC CTCGGACACC TTC

53

(2) INFORMATION FOR SEQ ID NO: 2879:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 75 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2879:

GGGAACCTTG ATCTGCCCTT GAAATCCTGA AAAATGTTTG CAAACGGGAA TGATCTTGTG

60

CCTTGCTTTG AATGA

75

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2880:

AGAGAGGCCG AGATGGCAGA TGAGATTGCC AAGGCTCAGG TCGCTCGGCC TGGTGGCGAC 60  
ACGATCTTCG GGAAGATCAT CCGCAAGAAA TACCAGCCAA AATCATTTTT GAGGATGACC 120  
GGTGCCTTGC TTTCCATGAC ATTTCCCCTC AAGCACCAAC ACATTTTCTG GTGATACCCA 180  
AGAAACATAT ATCCCAGATT TCTGTGGCAG AAGATGATGA TGAAAGTCTT CTTGGACACT 240  
TAATGATTGT TGGCAAGAAA TGTGCTGCGG ATCTGGGCCT GAATAAGGTT ATCGAnGGTG 300  
GTGAnTGAAG TTCAGnGGTG GACATCCGTC TATCACGTTT A 341

(2) INFORMATION FOR SEQ ID NO: 2881:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2881:

GCGGTTACTG TGTAATGGCA TTAAATATGA AACGAGCCGA TGGAGCGTTG 50

(2) INFORMATION FOR SEQ ID NO: 2882:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 81 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2882:

CTCATCATTT GTAGTTGGAA AGGTTTATGT ACATTTGGAA AACACCGACA CATGACGTAT 60  
CTCCATTGCA ATTTACACAA G 81

(2) INFORMATION FOR SEQ ID NO: 2883:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2883:

5 TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT 60  
TTTTTTTTTT TTTTTT 77

(2) INFORMATION FOR SEQ ID NO: 2884:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2884:

20 ACGGTGTGCT TGATGCACTT GGAACGTGA GTTGGGTGT GACTTTGCTT TGGCTTGCTT 60  
GCTGAATGTT TTGACTATGC ATTGCGTATA TGACTTGnAG CGCG 104

(2) INFORMATION FOR SEQ ID NO: 2885:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2885:

35 AGCAACGTGT CTGTCAACGT GGTGTCATTG GAAAAGGCGT CATGTATTGn CCGGTGGGAT 60  
TTACGTGTAG TCACACATGT GCCCAATTAT TGTTTTGAGG CCAACTTGAG TAGGTTGATG 120  
GTTATGT 127

40 (2) INFORMATION FOR SEQ ID NO: 2886:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
45 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2886:

50 TGAGCGAGTG CTGTGTGAGC GCGAGGTTGT GAGAGTTAGA ACCTTGAG C 51

(2) INFORMATION FOR SEQ ID NO: 2887:

55

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2887:

10 TTGAAACCGC GAACCTGAGT TCTGGTTAAC TACAGTCTGG TATACACATT GAGGGAAACT 60  
TCG 63

(2) INFORMATION FOR SEQ ID NO: 2888:

15

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2888:

25 AGTAnCATAC nCAACTATCT CAGCATACAA TATTGGnCAC CTCGCAGCTT 50

(2) INFORMATION FOR SEQ ID NO: 2889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2889:

AAAnATAATC CCGGTTTTAT CCCCTACCT AATTAGTGGG AAAAGTACCA ATTGCCAATT 60

GGTAAATAG GTTGCCATAA CGGCCTCCCA AAAGTAAATT CCCTTTTTTG GTTTA 115

40

(2) INFORMATION FOR SEQ ID NO: 2890:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 147 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2890:

AATCGGTCCG TTATACTCTT CATAATATTG TGGCGCAACC ATTTCAACTT TATCTTTTCT 60

TATAAATAGC ATCATCGCAA TAnTAAAGAA TAATATCGGA ATGATTAAAG TAACGATAAG 120

55

## (2) INFORMATION FOR SEQ ID NO: 2891:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2891:

AACACAACAA GTTGTTAAAG ATGCATTTTT ATCACAACAT AAATCTATTG GACGTAAAGC 60  
 TCAAGAAGCA TACTTATCAT ATCGTTTAGA ACAAGAGTAT AGTAAAGATG ATATCTTCCA 120  
 AGTATATCTA AACAAAATTT ACTATTCTGA TGGCGTAACA GGTATTAAAG CTGCTGCTAA 180  
 GTATTACTTT AATAAAGATT TAAAAGATTT AACTTAGCG GAAGAAGCTT ATTTAGCCGG 240  
 TTTACCTCAG GTTCCAAACA ACTATAATAT TTATGATCAT CCAAAGCTG CTGAAGATCG 300  
 TAAAAA<sub>n</sub>CACT GTTTTATACT TAATGCATTA TCATAAACGC ATTACAGATA AACAGTGGGA 360  
 AGATGCTAAG AAAATCGATT TAAAAGCGAA CTTAGTAAAT 400

## (2) INFORMATION FOR SEQ ID NO: 2892:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2892:

CCTAATTAAA CCTCCATCCA TCCTTTTGAA GGGGGATCTT TAATAAA<sub>n</sub>CC GGAAAGTTTG 60  
 GGGGAAAAAT CCTCCATCCT TTGAAGGGGG GGGCTTTCCA ATGGCCTTTA AGAATGGCCT 120  
 TTTCCAAGCC AACTTTTAAT TCCCCCGGT 149

## (2) INFORMATION FOR SEQ ID NO: 2893:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2893:

GCCCCAAGTA TTCTTGTAAG TATTATGATA CTCGGT<sub>n</sub>CTT TTTATGATTT ATGTTAATTT 60

TTATGTTAGT

130

## (2) INFORMATION FOR SEQ ID NO: 2894:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2894:

GATGAGACCT GAATTGATTG CAACCCAAAT CGGCATATGC AAATTGCATT AAAGTTGGTT 60  
CAACG 65

## (2) INFORMATION FOR SEQ ID NO: 2895:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2895:

CGCACAACAC ATTTAGCGAC TCAGATGTCG CGCGAATGGA CCGATATGGC GTGTCTACAC 60  
ATTGTCATAT TGTACGAATA GATGAGAAAT TnCAAAGACC GA 102

## (2) INFORMATION FOR SEQ ID NO: 2896:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2896:

ATTAAGTGAT GGGCTAATGT TTACGCCCCA ACCAAAGGTT TCCAAAGAGC CCTTGTGTTGG 60  
CCTGTGTTG 69

## (2) INFORMATION FOR SEQ ID NO: 2897:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 80 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2897:

ATTGAATTAA TGTCCCAACC AAACGAATGG TTGCCCTTTT TCCATCCAAA GGGGGCTAAT 60

5 TGGGAAGGGT ATTGGTTCCC 80

(2) INFORMATION FOR SEQ ID NO: 2898:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2898:

CAAATCCTGG AGATGAGCGT AACCAAAAAT AACGTTGAGA AAATGACCAC ACA 53

20 (2) INFORMATION FOR SEQ ID NO: 2899:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2899:

30 ATCGTGAACC TCTCATCCAA TCACTCATGT GAGTGAATTG GATGACCTGA A 51

(2) INFORMATION FOR SEQ ID NO: 2900:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2900:

AGCTTTCAGG GCTATATCAG ACCCACGCAT TCATCCACGT GAATGAAACA CG 52

45 (2) INFORMATION FOR SEQ ID NO: 2901:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

GGTACTGACA GAGGGACAAG GTGGAAAGGn TGCCAATGTA AGAATACGGT

50

(2) INFORMATION FOR SEQ ID NO: 2902:

- 5 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 72 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2902:

15 TGTCTGGAAT TCAGGTGAAT TGATGCGGAG ATTTAGGTGA TTAAGGAGTG TTGATTATGA  
AGATGACCAC TT

60

72

(2) INFORMATION FOR SEQ ID NO: 2903:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2903:

30 CATGCCAAAG CAGTAGGCAA GCCGCTTAGC AAGCCAAAAA CGTCAGCCCA

50

(2) INFORMATION FOR SEQ ID NO: 2904:

- 35 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 58 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2904:

TTGATGTTAC CTGATCGCAA TCTTGACCAC CTGGCAGGGT CTCATTGTTG GGTATCGA

58

(2) INFORMATION FOR SEQ ID NO: 2905:

- 45 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 69 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2905:

55

GCGGTCTAT

69

## (2) INFORMATION FOR SEQ ID NO: 2906:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2906:

ATTCCATTAG GTTCAATTAA AAATTAACGG GGTTATGGTT CCGGTAATTC GGG

53

## (2) INFORMATION FOR SEQ ID NO: 2907:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2907:

AAAGCTAAGA AAGGAGGATT AGCTGGTAGT GGAGGAATGT TAAGTGAGGC TGGTGAT

57

## (2) INFORMATION FOR SEQ ID NO: 2908:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 86 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2908:

GGGAATGGCG CATGAACGTG CACATCAAAT GACACTGCAG GAAATCAATT AGCACGGATA  
TGGCATAAAG ACAATGGTAA AAGTGG

60

86

## (2) INFORMATION FOR SEQ ID NO: 2909:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2909:

## (2) INFORMATION FOR SEQ ID NO: 2910:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2910:

GAATTGTTC CGAGGTATCG AGGACTACGC TTATAAGGTG CTTACAGATA CATTTCAT 60

TAATGGCGTG TGCTGCTGTA TGGGTTATAC TGTTACAGG TTTAAGAGA 109

## (2) INFORMATION FOR SEQ ID NO: 2911:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2911:

TTGTCCCCAT AGGGAGAAAT AATTCCGCCT GGGCAAAACC AAATCCACGA GCTTCTAAGG 60

## (2) INFORMATION FOR SEQ ID NO: 2912:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2912:

TAGATGTATC CAGCTGACAT TAGCTATTGG TAAGGTAACG GCTTACCAGG CAACG 55

## (2) INFORMATION FOR SEQ ID NO: 2913:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2913:

GCCATGAGGC CCACCCATCC ATGTTTATGG ATGGTGGATT GGGGAATTAC TTGTTTCAAA 60

TCA

123

## (2) INFORMATION FOR SEQ ID NO: 2914:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 58 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2914:

ATCCGTAATT CTGGCCTACC AAGGGTTTAG GCCAATGGGC CATTCTTTTA TTAAACCC 58

## (2) INFORMATION FOR SEQ ID NO: 2915:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2915:

TGGTGCGACA GTGGTAGGCT TTTTACGGTn TGChGGCGAG AGTTCTGTAG 50

## (2) INFORMATION FOR SEQ ID NO: 2916:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 68 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2916:

CTGTTACGCT ATGCCCCCA GTTGATGTT GAGTGGAAATC GTGTTTTTCG ACCTGCCTTT 60

GCTTTTTT 68

## (2) INFORMATION FOR SEQ ID NO: 2917:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 65 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2917:

GGAAA

65

## (2) INFORMATION FOR SEQ ID NO: 2918:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 101 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2918:

AAATTCCAAT CCTGGGAATG GGATTCCATG GTnTTTCGGAA AAATCCGCCA CCCCCAAAAA 60  
ATAAATGGGT CCCTTCCCTT GGAAATATTA CCTTTACCAG G 101

## (2) INFORMATION FOR SEQ ID NO: 2919:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 75 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2919:

TAATAAATCC ATGACCACCG TCACGACGAT CTGACTGATA AACTAATGAC ATATGACTGG 60  
TGTACACACC GTATG 75

## (2) INFORMATION FOR SEQ ID NO: 2920:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2920:

CTTGGATTGA CCATCATTAG TTTTGGTCAC TCTAAGTTGT ACTGTCCGTT GTACAA 56

## (2) INFORMATION FOR SEQ ID NO: 2921:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

GCTCATTGCT TGTATATTAA TCCCTGAAAT TGACCGTGTA TATCCCGTCG ATCTATCTTG 60  
TCCTG 65

5 (2) INFORMATION FOR SEQ ID NO: 2922:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2922:

GCAATATTCT AATCTGTATG TTACAGCACA TGGATATAGC ACATCCGGGC 50

(2) INFORMATION FOR SEQ ID NO: 2923:

- 20 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
25     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2923:

30 TGTGATTTAA CAGGATTACA CAGGTGTACC AGCCGATAGT TGATTAAGCT TCTT 54

(2) INFORMATION FOR SEQ ID NO: 2924:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 50 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2924:

ATCCTGGGAA GTGCTGAAAA ACCACTnCAC TAAAGGCATA GGAnCCACAC 50

(2) INFORMATION FOR SEQ ID NO: 2925:

- 45 (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
50     (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2925:

## (2) INFORMATION FOR SEQ ID NO: 2926:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2926:

TTGGTCACAT TTATTCTCGT GTTGTGCCGT TCTTCTTCAG TACTAAAGAC AAGGTGATTC 60  
 GG 62

## (2) INFORMATION FOR SEQ ID NO: 2927:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2927:

CAAAAGGCTA TCCCACCTGA TTGCAAAAG GAACTGGACT GCAAGGGAAG TCTCAG 56

## (2) INFORMATION FOR SEQ ID NO: 2928:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2928:

TGATCTTGCT ATTTAGTTGC GGCTTGGATT CATTTGGCAT GGTAAAGATT AAATTAGATG 60  
 CTTCAATTCAT TCAAGATTTC TTCATGTTAG CATTCTTTAC GACAATCGGT CTTGGTGATC 120  
 CATTGAAATT ATTTAAATTA GGTGGCAAAG TCTTGCTATT ATACTTTATG TTTTGTGCTA 180  
 TCATTTTCAGT CATTCAAAAC ATAGTTGGTG TATCACTAGC AAAAGTATTA AATATTAAAC 240  
 CTTTGTTAGG ATTAACAGCA GGTTCATGT CTATGGAAGG CGGTCATGGT AATGCTGCTG 300  
 CTTATGGTAA GACAATTCAA GATTTAGGTA TTGATTCGGC ACTGACAGCG GCTCTTGCAG 360  
 CTGCAACTTT AGGTCTTGTA TTTGGAGGGC TATCGGTGGT 400

## (2) INFORMATION FOR SEQ ID NO: 2929:



- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2929:

10 CTGAACCGAT GCGCGCACTTT GCTACGCCAC CTACAGCAGA TCCCA<sup>n</sup>GGGG G<sup>n</sup>GGAAGCTT 60  
 A<sup>n</sup>ACTGAAGC TCTACGTTCA ACATTTT<sup>n</sup>TCC ATTGGGGATT CCATGCTTGG GCTGTTTATG 120  
 GTGTTGTTGC GTTACGTTTG GCATATTCGC AATTCCGTAA AGGTGAACCA GGTTTATTAT 180  
 15 CTAGAACTTT ACGTCCTCTT TTAGGTGATA AAGTAGAAGG TCCTATTGGG ATTTT<sup>n</sup>TATTG 240  
 ACGTTT<sup>n</sup>TATC TGTATT<sup>n</sup>TGCG ACAATCGTTG GGGTAGCCGT TTCGTTAGGT ATGGGTGCTC 300  
 TACAAATTAA TGGTGGTTTA CATTACTTGT TCAATGTTCC AAACAATACG TTTGTACAAG 360  
 20 CGATTATCAT CATTTGTTGTT ACTATCTTAT TTATAGCAAG 400

## (2) INFORMATION FOR SEQ ID NO: 2930:

25

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2930:

ATGTAGATCT ATATGATGAC TTTT<sup>n</sup>TACAAG ATCCATCATC TGTACCAGAA GATTTAAAGT 60  
 35 CTTATTCAGC ACAATTAAGA ATGATGACTC AATTGTACCA GCTTTAAAAA GTACAAGTAG 120  
 TCAnAATAGC GACGGCACAA TTAAGCGTGT CATGCGTTTA ATTGATAATA TTCGCCAATA 180  
 40 CGGGCATCTT AAAGCCGATA TTTATCCTGT AAATCCTCCA AAAAGGAAAC ATGTACCTAA 240  
 ATTAGAGATT GAAGACTTTG ATTTAGATCA ACAGACTTTG GAAGGTATAT CAGCAGGAAT 300  
 TGTTTCAGAT CACTTTGCCG ACATTTATGA TAATGCCTAT GAnGCAATTT TAAGAATGGA 360  
 45 AAAACGTTAC AAAGG<sup>n</sup>CCAT TGCATTTGAG TATAC<sup>n</sup>TAT 400

## (2) INFORMATION FOR SEQ ID NO: 2931:

50

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

GGTTATACAA TCTAGAATCG CATGATAATT TAATGCTACA AATCGATAGT ACAATATATC 60  
TACCGTGAAT AACTGTGCAA ATAGTGACGT TGTAGCCGCC ATACGCATTT CATTTTCATC 120  
5 AGTTCTGCCA TAAATCAATG CATAGTCTGC AATTGAGCC ACTGGATTAT TAGCTGTACT 180  
AGATATAGTT ATGATGGGAA TACTGTAATG TGTGGCCACC TGTGCAATTG ACTGCAATTC 240  
10 ACTATGGACT ACCTTGGATT CGTCACAAAA ATCATGCAAT CTCTATCATC ATGCGTCGCA 300  
AATGTTGACA CAAGTGAAAT GCGTTTCCAT GTAATAACCT GACATTTGAA GCCATACGAG 360  
ATAACTTTGG AAAAAGATCA CCAATAGnCC AACTCGATGG 400

(2) INFORMATION FOR SEQ ID NO: 2932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2932:

25 CTTTCAGTAG CAGCTACAAT TGTCTTTAAC ATTTAAGTTT AAAGCTGTAT GTGTCAACCG 60  
CAAATACCGA TAGCCATTCA CTAATGAAGT TTCAACTAAT TTAGTACGAT CTGACAATAA 120  
30 CTTTTGTAA TCTTGGGCTG CTTCAGCTGA TACAGCAATA TTTCTCATTG TTTTAACAGC 180  
TTCTTCAGGA TATAAACCAG CAGCAGTTTC ACCAGATAAC ATTACTGCAT CTGTACCATC 240  
ATAGATTGCG TTGGCAACGT CACTAGCTTC TGCACGTGTA GCACGTGGGT TACGTTGCAT 300  
35 AGAATCTAAC ATTTGTGTAG CTGTAATAAC TGGTTTACCT AATTTGTnAC ATTGTCTGAT 360  
TAAATCTTTT TGAACCATTG GGACTTTnTC AG 392

(2) INFORMATION FOR SEQ ID NO: 2933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2933:

50 TGAATATGGT ATCGCATGTT GTGTATCAGC GATGACAATT GGTAACAAA TGCAATTCTT 60  
CGGTGCACGT GCGAACTTAG CTAAAACATT ACTTTACGCT ATCAATGGTG GTAAAGATGA 120  
AAAATCTGGT GCACAAGTTG GTCCAAACTT CGAAGTATTA ACAGCGAGTA TTAGAATATG 180

ATTAAATGTT ATTCACTACA TGCACGATAA ATACAGCTAT GAACGTAATT GAAATGGCAT 300  
 TACATGATAC AnAAATTGTA CGTACAATGG CAACAGGTAT CGCTGGTTTA TCAGTAGCAG 360  
 5 CGGACTCATT ATCTGCATTn AATATGCACA AGTTnAAACC 400

(2) INFORMATION FOR SEQ ID NO: 2934:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2934:

AAAAATATGCC ATGACTGGCA TGACAAGAAT TGGACGTTAG AAGCATCTCA AACTGGTACG 60  
 20 TTCAGAGGTC GTAACnTAA CTTCAATGGT GAAGGATTCT CACGTCAAAC ATTTAAAGTA 120  
 AATGCCGTTA GTCAAAAAGA CTACGACAAA TGGGTGAAAG AAGTTAAAGG TAAGAnAACG 180  
 TTAGATCAAG ATACATTTGA TAAACAATTA TTACCAAGCA CACCTAATAA AGCTTTAGAA 240  
 25 TTTAATGGTA CACATATGGC GTTTGTTGAT CCAGCAGCCG ATCCAGAATA CATCTTCTAT 300  
 GCATATAAAC GTTTCAATTT CGGATTGAAG GTCCCAAAC TCACTAGTGA GGAAAATATG 360  
 30 TTTAAGGTGT ATCAGACAAA CCCTTAATAC CTGCTCGTGA 400

(2) INFORMATION FOR SEQ ID NO: 2935:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2935:

ATGGAGTATA CAACTACTTC GGCATTGGCG CTTACGACAA CAATCCTAAC TACGCAATGA 60  
 45 CGTTTGCAAG GAATAAAGGT TrGACATCTC CAGCAAAGC AATCATGGGC GGTGCTAGCT 120  
 TCGTAAGAAA GGATTACATC AATAAAGGTC AAAACACATT GTACCGAATT AGATGGAATC 180  
 CTAAGAATCC AGCTACCCAC CAATACGCTA CTGCTATAGA GGGTGCCAAC ATCAAGCAAG 240  
 50 TACAATCGCT AAGTTATATA AACAAATCGG CTTAAAAGGT ATCTACTTCA CAAGGGGTAA 300  
 ATATAAATAA AGAGGTGTGT AAATGTACCA AATAAAAGAT GTGAAACGAG AATTAAAAAT 360  
 GATGGTGTTG ACTTAGGTGA CATTTGGCTG TCGTTTTACA 400

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2936:

AAACAATACA AACAAAAGAA AGTCAACCAA GGATGGATTC CTATTTTAAT CCTTGGTTGA 60  
CTCTTATTTT ATTTAAATTG TAGAACCTAG AAAATAAAGT TTAATTAAAA GCACCAATCA 120  
TTTCTACTTT GAAATCTAAG GTTCTAAAA TAGCAATGAC TTTCTTTATA TCGGTTGTAA 180  
TTGCAGAATC AGCCTGAACG AAAAATCGAT ACATACCTAA TTGTGTTTTT AAAGGACGAG 240  
ACTCAATCCA GGGTAAATTA ATATTAAACA AAGCAAATGT ATTAAGCACA CTTGCTAACA 300  
ACCCGGGTTA TCATGCATTG GTGTAATTAA AAACATCAAT GGTGTCGCAT TTTGATCAAA 360  
TGCTGCTGAT TTTTATAAC TAAAAACGTG TCAGGTATGT 400

## (2) INFORMATION FOR SEQ ID NO: 2937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2937:

TTATTATCTT GATACATTGA GTGTATATTC CATTTTCCAT GAGGCGTTAA ATAACGCATA 60  
CCAAAGCATC TGTACCACCT TTAATTTTCT TATCTCTATT CCCAAATACC ATTGGCGGCA 120  
ATGTCGGTTT ATATACTGGT AAGCTCTCCC CAAATTGTTG GAAAACTTCG TGATCCACAT 180  
AATAACTTTG GACGTCCTGT TAATGTTCTA AAAGGTACTA GACGTTCTAT ATTCGTTGTA 240  
AATGGTGGA TATCGTCGAC CTTGTTTATT TGAACCGGGG AATACTGCTG TCGGTATTAC 300  
TTCTCGTGGT TGTGGAAGTT ATATTTAAAA ACGGAAATTT TCTCAGCAGC GntTTCGTTA 360  
GGAAATATCT TTAAACGGGC ATTCCAGTTT GTTCnTCGGG 400

## (2) INFORMATION FOR SEQ ID NO: 2938:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2938:

TATCTCTTAA AGCCGGTGAT GGTGGTAATG GTATTACCGC ATACAGAAGA GAAAAATATG 60  
 5 TACCATTTGG TGGACCAGCT GGCGGTGACG GTGGTAAAGG TGCTTCAGTC GTATTTGAAG 120  
 TGGATGAAGG TTTAAGAACG TTATTAGATT TTAGATATCA ACGTCATTTT AAAGCAAGCA 180  
 AAGGTGAAAA TGGCCAAAGT AGTAATATGC ATGGTAAAAA TCGGAAGAT TTAGTATTAA 240  
 10 AAGTTCCACC TGGTACAATT ATTAATAATG TTGAAACAGA CGAGGTTTAG CAGATCTTGT 300  
 TGAAGATGGT CAAAGAGCTG TAGTAGCGAG GGCGGTCGAG GTGGCCnAGG TAATTCACGT 360  
 15 TTTGCAACAC CTAGGAAACC CTGGCACCTG GACTTCATGG 400

## (2) INFORMATION FOR SEQ ID NO: 2939:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2939:

CTAACCTCGA GTTCGTATTA TGCCACCAC ATGTCTGCTG GCTTGTCGTA AATATTAACA 60  
 30 GATTTCAAAG TTTGACAAGC TTTTGGAAA CCTTCTTCTA CTGACATAAT AGGATCTTCA 120  
 TGTTC AATAC TTAATACATA ATCATATCCA TTAATAATAA GTTGACTTAT GATATCTGCC 180  
 CATACATATG GACTATGTCC TAAGCCAACT GTACGGAATG TCATGCTCTT GTCGCAACGT 240  
 35 TACCATATGG TTGCATATCA GTTAGACCAT ACATATTTAC ATTTTCTTGG ATTAATATAC 300  
 GTATCTTTAG CATGGAAGTG ATGAATTGCA TTTGCTTGGn CTAATATGCG AATCGCAGCC 360  
 AATTGGGTCA ATAnCnTGGC CACC 384

## (2) INFORMATION FOR SEQ ID NO: 2940:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2940:

TTTCATATTT TTCTATTAAT GATTCATATT GTAGGGTGAT TGCAATGTCA TCTAAGCCAT 60  
 TTACAAGTTT ATTCTTCCAA GTTTCATCAA TTTCAAAATG GAAACGCTTG TCTGGTGATG 120

CACTTTTTTC TAAAACGATA GGCAACATCG CATTTTTAGT GCAATTCATA TAAAATATGT 240  
 CACTGAAACT TCCTGCAATA ATAATATGAA AACCATAGTC CTTAAGAGCC CAAGCAGCAT 300  
 5 GTTCACGACT TGAACCACAT CCAAAATTAT CTCCAGTnAT TAAATnGGAG GCCCCTTTAT 360  
 ATTGTGGTTT GTTAGGGTTG AATCAGGGTT TnTnGGAACC 400

(2) INFORMATION FOR SEQ ID NO: 2941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2941:

20 ATCATAATCC ATCGTGCGTC CAAGAAGTAC TTGATTATTT AAAGTTTGTA TTGTGAATCC 60  
 TGTGCACATT GTTCTCACTC CTCTGTACCT TCATTACTTT TAATCACTTT CAAATAAAGC 120  
 TGTTCACATT AACATACTA TAAAAAATCA ATTATACAAG CAATTAATTG ATATTCATTC 180  
 25 TCAATAACTG TGGTATGATA TGTAAGGAAA TCATGACTTA TGTGTGAGTG AACGATCATC 240  
 TATACATCCG TTCACTTCAT CTCATGACTT TCTATATTTA ATTTTTACAA GGgAGTGACA 300  
 30 TCTGTGAATa ACACACAATC TTCACCACGC gTAAaTaTtAT TaTTGCGATT ATGTTGTCTG 360  
 CATAACATAT GGTGTGTTGCA CAATCATTAT TAnTATAGGA CCTCCGTTG 409

(2) INFORMATION FOR SEQ ID NO: 2942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2942:

45 ATGAAGTGTC AAAAGGTTTA AAAACATCTG AAAGGGGTTT GCACATGTTT TAACTTTAA 60  
 AAATAAAGGT GGATGTCCAA AATGTCGACC AGCAATCAAC TATTATTTAA ACATGGTTTA 120  
 TCCACATGAT CATGAAGATG AAAGAGAATC AAGATTTGCT AACGAACGTT ACCATGCGAA 180  
 50 TATTCAAAAT GATGGTACAT TTTCTGTTAT ACCTCAAATG CGTGGGGGTG TTACAGATGC 240  
 AGACCAACTG ATTCGTCTAG GAGAAGTGGC TAAGAAATAT CATGTGCCAC TAGTTAAAGT 300  
 GACAGGTTCA CAACGTGTTG GTTTGTATGG AGTTAAAAAA GAAGATTACC AAATATATGG 360

## (2) INFORMATION FOR SEQ ID NO: 2943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2943:

ACCTGGAAAT GTATGTGCCA TCTCTTTAAG CCAATCAGTA TCTTGAATAC CTTTCGTTCC 60  
 AACTATGCAA TAATTAATCC CTGCGGCAAA GTAGTCCATG ATTGTGACTT CGTACGAATG 120  
 CCACCACCTA CTTCAATATC TTTGGTTGTT AATCTCCTCA ATGACTTAAT ATAATCAAAC 180  
 TCTCGGGCAT GCTGTGCCTT AGCACTCATC AAGTCGACGA TATGAATACG ATTCACACAT 240  
 TCAAATTGAC TATAGTAAGC AATACTTTCT TCAGCCGAGC GTGGACATTT TTTCTTCACT 300  
 ATCATATTTA CCCTCTGTTA ACCTCACACT TGTTGACCCA ATCAAATCAA TCGCTGGGCC 360  
 ATAATTCAAT CATTTnATAA ATCCCCCTTG TATTGGCCTG 400

## (2) INFORMATION FOR SEQ ID NO: 2944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2944:

AACAAAAGGG GTCTATCGTC AATCGTTTCT TGAATAGTGT TGAAAAATC GGAAATAAAT 60  
 TGCCAGATCC TAGCGTCTTA TTCTTTTTAA TGTGTGTGGG CTTAGCCATT ATGACATGGG 120  
 TTATCTCATT ATTTAATGTA TCTGTTAAGC ATCCAGGTAC GCATCAAACC ATTTATATTA 180  
 AAAATATAAT TAGCCATGAT GGATTTACGA TGATAATGAA TGATACGATT AAAAATTTCT 240  
 CAGAGTTCCC AGCATTAGGC TTAGTACTAG CAGTGATGAT TGGTATTGGT GTTGCAGAGA 300  
 AAACAGGATA CTTGATAAG TTAATGATTT CTGTTGTGAA TCGCGCACCA CGTTTCTAAA 360  
 TTTACCGCTA TAATATTAAT GGGnATTTTA GGGAGTCAGA 400

## (2) INFORMATION FOR SEQ ID NO: 2945:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2945:

5 ATTTTACAAG TAACGGTGCA TCACCAGATT CTAATTTAAT GTCATGCTCA GCAGCATTTT 60  
 GATAACCCAA CTTTTCAAAG TAGTCAAAAC AATGGTCTAC AACAAACGTA CTATACTCTT 120  
 GTGCTTTGGC CGCTCTTCTA CTGCTTGAAC CAAGCCACGA CCTAATTTTT GTCCACGTAA 180  
 10 TTCAGGATGA ACTGATAAAG AGGCAATCGC CAAACCATAA TACGTCTTAT CATCACTATT 240  
 AATTTCTACT TCAATTAATA AAACGTGTCC AACGACATCG TTATTTTCAT TTTTCGCTAT 300  
 TACTTCTAAT TCAAAATTAT AGCAAGGAGA TTTTCTTAAA TGGTTTACTT TCGGCACGTG 360  
 15 CCTGGCCAAC TCGTTTTTCAG GATTATCATC CAACTTTTCC 400

## (2) INFORMATION FOR SEQ ID NO: 2946:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2946:

GGAAATAATT ACTTGAGCTA GATAAGTTGA CAGCTGTGCA ATTATTTTCA GCAGCTAATT 60  
 30 GTAAAATTCG CTCTAATCTT GCTGATGAAT GTTCAGGCCC TTGACCCTCA TATGCATGAG 120  
 GTAAGAATAA TGTTAATCCT GAACGTTCTC CCCATTTTGA GCGAGAACTG AATAAGAAGT 180  
 TGTCAAAAAT CATTTGTGAC ATATTTGGCA AAATCACCAT ATTGTGCTTC CCAAATATTG 240  
 35 AAGCTTTTTT TGTTTTCCAC ATTATAGCCG TATTCAAAAC CAACTACTGC TGCTTCTGAA 300  
 GCGGAGAATT GTGTATATCA AATGTCGCTT TTTGAnCAGG AGCATGATGT AAAGGTGTAT 360  
 ATGTTnCAC nGTTTGCTCA TCATGTnACA CGGCAGCCGT 400

## (2) INFORMATION FOR SEQ ID NO: 2947:

## (i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2947:

50 AAGTGGCATA AAAAAATCAC ATGACGATAC ATTGTCGTCA TATGACTTTA AATATTATTC 60



TTCAATTGTG TCACCGATTT TTAATACATC TTCCACTTTT TCAATTCTAT TTTTGTGAAAT 180  
 TTGTGAAATG TGAAGCAACG CATCTTTACC TGGGAATAGG CCTACAAACG CACCGTATTT 240  
 TTCAATACGT TTAACAGTGG CTTGGATAAG TTTGACCTAC TTCCGCTTCA CGTGTAATTT 300  
 CCTCAATGAT TTCACGAGCA CGATTTATCA TAGCTTGATC AACAGCACCC ATAAAGATAG 360  
 TACCATCCTG GnCCATATCh AATTTAACAC CnGGnTCCTC 400

## (2) INFORMATION FOR SEQ ID NO: 2948:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2948:

TTTTTCAAGT TTTGCTGAAG GCTTTACACA AGGCTATTTA ACAATGGATG CCATTGCAGC 60  
 AATTGCTTTT TCAATGATTG TTGTTAATGC AGTAAACTA ACAGGCATTA CTAAAACAAA 120  
 TCAAATATTC AAACAACTT TGA CTGCTGG TTTAATTGCA GCCGTAGCTT TAATTTTCAT 180  
 ATATATTTCA TTAGGTTATA TTGGTAATCA TATGCCAGTA AGTGACATGA CGTTAGATCA 240  
 ATTGAAATCC AAAGATCGAA ACATTGGGAC ATATTTATTA ACGACAATGG CTTCAACAGG 300  
 ATTTGGTCAT CCGGAAAATA TTATTGGGCA TCATTGTGGC GCTGGCATGC TAACTACAGC 360  
 ATGCGGGCTA TGGTGCAATT CCTGAATATT CCATAGATCG 400

## (2) INFORMATION FOR SEQ ID NO: 2949:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2949:

CATGGCTTCA GATTGTTTGA ATTGAATGGA CAATTTTGGn TTCTGTCCAA AATTCTTACA 60  
 AAATCTTCTA CCGATAAACT ATCAAGTTCA ACTCTAATCG GAAAAACGAC CTTGCAATTC 120  
 TGGTATCAAG TCACTCGGCT TAGATACATG GnAAGCTCCA GCACCTATAA ACAGCATATG 180  
 TTCAGTATTC ACAGTACCAT ATTTGGTTTG AATAACGCTA CCTTCAAGTA TAGGTAAAT 240  
 ATCTCTTTGA ACACCTTGTC TTGAGACATC TTGACCACTA TTATGATTAT TCGTCGCAAC 300

GTTAGCGCTT TCTTGATCAn TTAGTTCATC CGCATAACTA

400

(2) INFORMATION FOR SEQ ID NO: 2950:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2950:

15	TTGACTTTGT AACTAAACTA CTCACTCGAC CGACTCAACT GTTTAAATGT TTCAGATGGT	60
	TAACTCTAA ATACTACGTA TAAATCACCA GCAGGTCCTC CATTACGCC TGGAGAGCCT	120
	TCACCAGCTA ATCTAATTTG TTGTTCAATTG TCGACACCTT CAGGTACTTT CACTTCTAAT	180
20	TAACTGTTT TATTTTCAGT ACCTTTTCCG TGACATGTTG GACAAGCTTC TTCAAATTCT	240
	TGACCACTTC CATTACATTT AGGACAAACT TGTTCACTAC GAACTCTACC TAAAATTGTG	300
	TTTTGTTCTA CAGCTACATG ACCAGCGCCA TTACAGTAAC TACAAGTCTT TTTACTTGTT	360
25	CCAGGCTTTG CACCATCACC ATGACATGTT TCGCATGThA	400

(2) INFORMATION FOR SEQ ID NO: 2951:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2951:

	CAATGATTTT AAAAGATGCA ATAAAACCAA ACTTAGTACA ATCAATTGAA GGGACACCTG	60
40	CATTAGTTCA TGGTGGACCA TTTGCGAATA TCGCACACGG TTGTAAGTCA ATTTTAGCAA	120
	CTGAAACAGC ACGTGATTTA GCTGATATCG TTGTAACGGA AGCTGGATTT GGTTCCAGACT	180
	TAGGCGCTGA AAAATTCATG GACATTAAAG CGCGTGAACA GGATTTGATC CGGCAGCTGT	240
45	CGTTGTTGTT GCGACAATTC GTGCGTTAAA AATGCATGGT GGTGTAGCGA AAGATAATTT	300
	AAAAGAAGAA AATGTAGAAG CAGTAAAAAG CAGGAATGGT TAATTTAGAG CGTCATGTTA	360
50	ATAATATTAA CAATTCCGTG TAGAnCCGGT TGTTGCCATA	400

(2) INFORMATION FOR SEQ ID NO: 2952:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2952:

TCAAGTAGCA AAAGAAACAG GTGCTTCAGT TATCGGTATT GATATTGGTC CACAAGCCGT 60  
 10 TGACCTAGGG CGCAGAATCG TTAACGTCTT AGCACCAAAT GAAGATATAA CAATTACGGA 120  
 TCAAAAGGTA TCTGAACTTA AAGATATCAA AGATGTGACG CATATCATAT TCAGCCGACA 180  
 ATTCCTTTAA AGTACAGCAT TTTAGAAGAA TTATATGATT TAACAAATGA AAATGTCCGT 240  
 15 AGTTGCAATG CGCTTTGGTG ATGGCATCAA AGCAATATTT AATTATCCGA AGAAACAGCG 300  
 GAAGATAAGT GGGCCATGTG TGAATAAACA TATGAGACCA CAGCAAATTT TTGATATAGC 360  
 ACTTnATnAA AnAGCCGGCT ATAAAGTnGG TATTACGGAT 400

20

(2) INFORMATION FOR SEQ ID NO: 2953:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2953:

CGCAATTCAC AATAACATTA AATAATTTTT GGTCTCATAT TTTCAAAAAA CATACTGTTA 60  
 TTATCCCATG GGnTTAAAAA TATCATTAGT ATATAAACGA AACACTTTAC GATAAATGAT 120  
 35 ATCTGCAAGC CAAGCTGTTA CAAATGGTAC AACAAAGAAC GCTACTACAA TTAGTAAGAC 180  
 ACTCAACCAA GCAGAATCAA CCTCCATAAA TTTAAATGCA TTAATCGGTC CTACCATTCC 240  
 TATAAAACCA AATCCAGCTG ACTCTTTCGT TCCATGAATA CCTACTAATG CTGATACCAA 300  
 40 ACCTGATACA ATGGCTGTCG TAnGGGCGGG GnGCATAAGA ATTGGATATT TCACCATATT 360  
 AGGTATCATC ATTTTAACGC CTCCAAAGAA GACCGGATAA 400

45

(2) INFORMATION FOR SEQ ID NO: 2954:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2954:

AACACTTTAA TGGAGATTTA GCAGGCACTG TTACACTGAC AGCAGGTTTA GGTGGTATGG 120  
 GTGGTGCGCA ACCGTTAGCA ATTACTATGA ATCATGGGGT AGCAATTTGC GTGGATGTTG 180  
 5 ATGAAACACG TGTTGATAAG CGAATTGATA CGAAATACTG TGATGTTAAA ACAGCTGATT 240  
 TAGATGAAGC ATTAAAATTA GCAGAAGAGG CGAAAGAACG TGGGAGAAGG ATTATCAATC 300  
 10 GGGTTAATTT GGAAATGCTG TAGACATCCC ATCCAAGCGG ATTCTAGGAA AAAGGGTTTT 360  
 AAAATTGGAC ATTAATTACT GGnCCCAAAC CAAGTGCCCC 400

## (2) INFORMATION FOR SEQ ID NO: 2955:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2955:

20  
 25 TTCAGAATAC GAGCAATGTC AGTTGCAGTG TTTAATAAAT TTTGTTGCT ATTTTGTAGG 60  
 CATCTTCTAA AGTGCTAGGT GAAGAGATTA TAGAATAGGC ACTATCAATA CCGAAATCGT 120  
 AAACATGTTG ATAATTTTCG CCTAGACTGC CACAAATCGC GATGACAGGA ATATGATATT 180  
 30 GTTTTGCAGC TAACGCAACG CCTACGGGTG TTTTACCAA GATGGTCTGA TAATCCATGC 240  
 GTCCTTCTCC AGTAATAACG AGGTCTGCAT CTTTAATTCT TTGATGAAAA TCTGTAATGT 300  
 CAAAGACGAC ATCAATACCT TTTGTTAAAG TTGTCTCACA AAACGnTAAT AATGCTGCGG 360  
 35 CCATACCGnC AGTGCACCAG AACCTGGTAT TTGGTThACG 400

## (2) INFORMATION FOR SEQ ID NO: 2956:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2956:

45  
 50 AATACGTCCT TTATATAATG TTAATAACCA GTTAAACAAT TTCACACCAG TTGGAATACC 60  
 AATCAGCATT GTTGAAATTG AGAAGAATGA GTTGATTAAC GCACCATTAC CCATTGTGAA 120  
 GAAATGGTGA ACCCAAATA AGAACTAAG GAACGCGATA CCGGCAGTTG CCCATACCAT 180  
 55 ACTTTGATGT CCGAATAAAC GCTTACGAGC GAATGTCGGG GATAATTTCT GAGTAAATAC 240

CCAAAGCATT GGGCATACCG CCATGTGGCA CTGTGGAAGA ATGCTGTGTC CAATATTCCG 360  
 nTCATTGGTn CATTAAATGGC TAACGCTAAC GGTTTAAAGG 400

(2) INFORMATION FOR SEQ ID NO: 2957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2957:

TAGTAATTAA TACGATGTCA GCACCTACTG ATTTTGCTTT GTCTGCTAAT AATCTTAAAT 60  
 GTTCCGTGGA CCTGAACCAG AGATAATTAC AAATACATCA TTCGACTTAA TCGCAGGTGT 120  
 CGTTGATTCT CCAACAACAT GTGCCTGTTT GCCGAGCTGA TTTAAGCGCA TTGCAAAACT 180  
 ATTCGCCACG AATCCTGGAA CGTCCTTTGC CAGCTACAAA TATATGTTCA GCATGTAGTA 240  
 TTTTGGGATG CAAAGTTGG AAAACTCCAT CCGnTTCAAC ATGTGACAAA GTCATCTTTG 300  
 AATTCATCTA GAnTTAATTG ATAGTCACTA AnTTTAGCCA TATTACTTAC CTTCGGTTGC 360  
 CAGCGCGACC ATTGTTTCGC AGCTTCTTAC TGGG 394

(2) INFORMATION FOR SEQ ID NO: 2958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2958:

AATTATTCTA CCTATAATTA AAAATGCTGG CAAAGGTGTA ATGATGATGA GTAATGAACC 60  
 TACAACATTT AATATCAATC CTACATAAGT AATTTTGACG CGACCAAATT TATCAGCAAC 120  
 ATCACCAGCA CCTACGATAA ACAAACCAGC AAATAAGGCA GATAAGCTAA CAGCGATTAT 180  
 TTATCGTTCC AACGTCACTA CTATATGTTG ATTGTAATGG GACAACAAGA TTAACAAGTG 240  
 ACTGCGCGAA TAGCCAAAAG GTAATAACCC CTAAAACGAT ACCCAAAnGC AATCGGTTGT 300  
 TCACCTCTTA AATTGTTTTG ATGTGTCChT GGATTAGGAT AAGCCTCCTA TGTTTAGGAA 360  
 AAACAATTTT TAATATGGTA TATTAAGGAn ACATTTCTTT 400

(2) INFORMATION FOR SEQ ID NO: 2959:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2959:

10 CTTCTTTCTC AACATCAAAG AACATATGGT TTTGTTTCAA ATATTCTTTT ACTAGCGCGA 60  
 TATGTTTCGTC TGATCTACCA GTTAACTTCA TATATTTAAG AGATTCATCA TCAACTGGGA 120  
 AGAATCCGCA AGTTGCTCCA TACTCTGGTG CCATGTTTGC AATTGTAGCA CGGTCTGCTA 180  
 15 GTGGTAAATG TTGTACACCT GGACCAAAGA ACTCCACAAA TTTACCAACA ACACCTTTTT 240  
 TACGTGGCTC TTGAGTTACT CTTAACGCTA AATCAGTTGC TGTGCGCCT TGTGGTAATG 300  
 AATTTACTAG TCGTACACCA TTAACCTCTG GAATTGGGGA AATAGGAGGG TTGTCCAGGC 360  
 20 ATTCCAGCTT CAGTTTCAAT ACCACCAACA nCCCTCCTAG 400

## (2) INFORMATION FOR SEQ ID NO: 2960:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2960:

ACGTCAAATG TAATCACAAT CGGAAAGTAT CGTGACAATG CATATATAAC AGGGAGGGTT 60  
 35 TAAATATGAG TTAATAAGGG GATTTTTAGA TTTAGGTGCA CTGTTTATTT TACCGGTTGT 120  
 CATATTCTTG CTTGGCCTAT TCTTTAGGCA GAAAATTGGA GCGGCATTTA GGTCTGGTTT 180  
 AACAAATAGGT GTGGCTTTTG TAGGGATTTT CTTAGTCATC GATTTATTAG TTAAAAATTT 240  
 40 AGGGCCAGCA GCACAAGCGA TGGTTAAAAA TTTAGGCGTC AnTCTGAATG TGGATTGATG 300  
 TAGGTTGGCC AGCAACATCA TCTATCGCTT GGGCATCATC TGTnCGCnCC ATTTTATTAT 360  
 TCCACTCGGG ATTCATAGTT 380

45

## (2) INFORMATION FOR SEQ ID NO: 2961:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GGCCATTGGT CGAACTTACG AAGAATCATT GTTAAAAGCA ATTCGATCAC TTGAGTATGG 60  
 TGTGCATCAC TTAGGATTAC CAAATGGTGA AAGCnTCGAT CTTGATTATA TTAAAGAACG 120  
 5 TATTTACACAC CAAGATGATG GACGATTATT TTTCATCGGC GAACAATTAG AAGAGGCACA 180  
 ACAGTAGAAG AAATTCATAA TATGACTCAG ATTGATTACT TCTTCTTACA CAAGTTCCAA 240  
 10 AACATTATTG ATATTGAGCA TCAATTAAAA GAGCATCAAG GTGATTTAGA ATATCTTAA 300  
 TATGChAAAAG ATTATGGnTT TAGTGGTAAA ACAATAGCGC ATCGCCTTAA TATGACGG 358

## (2) INFORMATION FOR SEQ ID NO: 2962:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2962:

TTTGGGCATC ATTAGGAAAA TTCTTTGAGC AACTTTAGTG TCTACTGGGT AATACAATTT 60  
 25 TATCACCATG TTTTCTAAT AAATCTTTTG CGAATCGATT TTATCTTCTT CTAATAATGA 120  
 AATACCAATT TCTTTACCTT GCGCTTTTAA GAAAGTATAA GCCATACCTC CGCCGATGAT 180  
 AATTTTATCA GCTATGTAA CTAAGTTTTT GATGACATTA ATTTTGTGAG ATACTTTTgH 240  
 30 GnCACCATAA ATAGCAACAA CTGGTTTATG TGGATCGTTA ACTACGCCGC CAATAAACTT 300  
 AATTTCTTTA TCCATTAAGA ATCCAGCTGC AGTTTCTAAA TGTGTAGAAA TACCAACATT 360  
 35 ATTn 364

## (2) INFORMATION FOR SEQ ID NO: 2963:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2963:

GTTGATTCT TGAAAGATAA TAAAAAATTC AAAGAAATGG GATCTAGGAT TCCTAAAGGT 60  
 GTCTTACTTG TTGGACCTCC AGGTAAGTT AGAAACATTA CTTGCTAGAG CGGTTGCAGG 120  
 50 TGAAGCTGGC GCACCATCT TCTCTATTAG TGGTTCAGAC TTTGTAGAGA TGTGTGTG 180  
 TGTGTTGTCG AGCCGTGTT GTGACTTATT CGATAATGCT AAGAAAAACG CGCCTTGTAT 240

TCATGATGAA CGTGGAACAA ACCCTAAACC AnTATTAGTT GAAnGGATGG TTTnCGGTGG 360  
 AAAATGAAGG TG 372

(2) INFORMATION FOR SEQ ID NO: 2964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2964:

TTAGCAGAAC GCCCACAAAA CCTATCTCTT GCTGTAAAAG AATTTGTGAA nCTGCTGGCT 60  
 TAAAACGTGT TGGCATAATT GCAGCTTTAG GAGCTACAGT TATGTTAGGT TTAAGTACAA 120  
 TTAAAAAATT ATGCCGTAAA TAGAGCAAGA CATAACAAT AATTTAGGAG TCTGGAACAA 180  
 TAATCAATGT TCTAGGCTCC TAAATGTTAT ATTGGCAGTT CTGAAACATT TATAAATCTT 240  
 TGATTATGAA CTCACAACAG TGCTCTATGC TTTTATAGAT TTTAATAAAT TAGCCATTTC 300  
 AATTGCACTT ACTGCTGCTT CACACCCTTT ATTGCCAGCT TTCGnACCTG CnCCTTCCAC 360  
 AGCTGGGCAA TACTGCCAGC CG 382

(2) INFORMATION FOR SEQ ID NO: 2965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2965:

GGGAATCATA CAATCATTAC CAATAAACAT GTTACTTATC ACATGAAAGT CGGTGATGAA 60  
 ATCAAAGCAC ATCCTAATGG TTTTATAAT AACGGTGGTG GACTTTATAA AGTTACTAAG 120  
 ATTGTAGATT ATCCTGGTAA AGAAGATATT GCGGTCGTAC AAGTTGAAGA AAAATCAACG 180  
 CAACCAAAAG GTAGAAAATT CAAAGATTTC ACTAGCAAAT TTAATATAGC ATCAGAAGCT 240  
 AAAGAAAATG AACCTATATC AGTCATTGGT TATCCAAATC CTAATGGAAA TAAACTACAA 300  
 ATGTATGAAT CAACTGGTAA AGTACTATCA GTGAATGGAA ATATAGTGAC ATCTGATGCG 360  
 GTTGTCCAAC CTGGCAGCTC TGGTTCACCT ATATTAAATA 400

(2) INFORMATION FOR SEQ ID NO: 2966:



- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2966:

10 TGGGGATTCA CAGGCTAATA CATTGACTT TATTAGCTGG TGGCGGTAAC GGCGCTGAAC 60  
 TTAAATGCG ATTCAAAGTG CTGCAATTAT AAGTGCATTC CCATTCTCCT TTGTCGTCAT 120  
 ACTCATGATG GTAAGTTTCT ACAAGGATGC GAACCAGGAA CGTAAATTCC TAGGTTTAAC 180  
 15 ATTGACTCCG AATAAACATC GCTTACAAGA ATATATCAAG AGTCAACAAG AAGTTATGAA 240  
 TCTGACATTC TTGAAAAGCG TCAGTCACGT GAAATATAGA GAAAAAAGAT AACTAATAAA 300  
 GTTTAGTTAA GTATTTTAAT AACAAAGTAGT ATGTCATTCT AGTAGCTAGA ACGGTnATAC 360  
 20 TACTTGnTG TTTTGTGGA AATTGAGTAT TTCAAAGGTT 400

## (2) INFORMATION FOR SEQ ID NO: 2967:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 387 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2967:

ACGAGGAATT AGTGAAGTAC AATATTATCG GTGGTTTIGA TTTAGGTGTT GTTTCAGACG 60  
 35 ACTTTAAAAA TCACATGTTA ATAGCTGTAA CTGAATTAAG AACAAAAGAT GAAATCGATA 120  
 CATTTGTAGA AAAGGCTGGT GAGTTAAATG ACTAGTAAAT CAAGTCCATT AATTTTGA 180  
 AGATCTCGTG AAGGCAGATA TGCATATTCA TTACCAAAAA GTGATATTAA AACAAATTCT 240  
 40 GTTGAGTCAT TGTTAGATGA TAAATTTATT CGTAAAAACA AAGCGGAGTT TCCTGnAGTT 300  
 GCTGGAACTA GACTTnGTAC GTCATTAATC CTGGACCTTT CCAAATAAAA AATTCCGnG 360  
 GTAGACACCG GGTTTAACCC ATGGGGT 387

## (2) INFORMATION FOR SEQ ID NO: 2968:

## (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 806 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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	AACAAGTGCA AGTGAGTCAA CATCAGAAAG TGGCTCAACA TCACTCAGTG ACTCAACAAG	60
	TACAAGTAAC TCAGGATCAG CAAGTACGTC AACATCGcTC AgTAACTCAG CAAGCGCAAG	120
5	TGAATCCGAT TTGTCGTCAA CATCTTTAAG TGATTCAACA TCTGCGTCAA TGCAAAGCAG	180
	TGAATCCGAT TCACAAAGCA CATCAGCATC ATTAAGTGAT TCGCTAAGTA CATCAACTTC	240
10	AAACCGCATG TCGACCATTG CAAGTTTATC TACATCGGTA AGTACATCAG AGTCTGGGCTC	300
	AACATCAGAA AGTACAAGTG AATCCGATTG AACATCAACA TCATTAAGCG ATTACAAAAG	360
	CACATCAAGA AGTACAAGTG CATCAGGATC AGCAAGTACA TCAACATCAA CAAGTGACTC	420
15	TCGTAGTACA TCAGCTTCAA CTAGTACTTC GATGCGTACA AGTACTAGTG ATTACAAAAG	480
	TATGTCGCTT TCGACAAGTA CATCAACAAG TATGAGTGAT TCAACGTCAT TATCTGATAG	540
	TGTTAGTGAT TCAACATCAG ACTCAACAAG TGCGAGTACA TCTGGTTCGA TGAGTGTGTC	600
20	TATATCGTTA AGTGATTGCA CAAGTACATC AACATCGGCT AGTGAAGTAA TGAGCGCAAg	660
	CATATCTGAT TCACAAAGTA TGTCAGAATC TGTAAATGAT TCAGAAAGTG TAAGTGAATC	720
25	TAATTCTGAA AGTGACTCTA AATCGATGAG TGGCTCAACA AGTGTCAGTG ATTCTGGCTC	780
	ATTGAGCGTC TCAACGTCAT TAAGAA	806

## (2) INFORMATION FOR SEQ ID NO: 2969:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2969:

	ACCATCTACT CCGTTAATAG TTACACTGTT ATCATTGGTG TTTGGACTTT CAGCCCTTGC	60
40	ATCTAAAAAT ATAAGCTGAT TAAATCTGT TATTACTTCT TCCTTGTAAC CATCTATGAT	120
	TTTTACAAAA GATTGCATTA ATTAGTCAAA CCTCCCATAT AATTATTTGC ATTTGCTCTA	180
45	TGCCCCACTTT GTTTTGACAA TATTTTTTCT AAACCTCTAA TTGCATCATT AGAACCTAAG	240
	GATTATCCTG AGAAGAAACA GTTTGAATCA ACGCATCTGT TAATThATTh CCTTTATCAC	300
	TTAACATAAC AATTTGGTTC AACAAATTTnC AACTGTAGAA GTATCATTAT T	351

## (2) INFORMATION FOR SEQ ID NO: 2970:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2970:

AGTGCTTGAT GAATTTTGAC CACAAATTCA AATGTATCAG GCGTTTCTTT TATCCATTTT 60  
 AATATATTTT TTTCCGGTTG TATCGCATAG TATGTCGCAT CTAATTCGAC AACCGGAAAA 120  
 TGTCCAGCAT ATGTTTTAAG TTTATCGGTT TGGCGTTCTA AATCTTCATA TAATGAATAG 180  
 TGATCACCCC AACCTGTTAA TCCGATGTTT ATCATATATA TCACCAATGT CATCATACCA 240  
 TATAACTTTT ATCATAATCA TTTCAGCGAA CTTTAGTTTG ATGTTTTTGC TTGATTAAAA 300  
 TCTTTTCGGC GAnCCTCAGC TTGATGTTTT TCGTTGATTA AATGGTAAAT AGnnACGCA 359

## (2) INFORMATION FOR SEQ ID NO: 2971:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2971:

CAGACGGTCA AGAATCTTAT ACTTATCAAA ATTTATACTG TGAAGCGAGT CTATTGGCTA 60  
 AAAGACTCAA GGCTTATCAA CAATCTCGTG TTGGGCTATA CATAGATAAT TCGATTCAAT 120  
 CGATCATTTT AATACATGCA TGTGTTGGTGG CAAATATTGA AATTGCGATG ATTAATACAA 180  
 GGTGACACC TAATGAGATG ACGAATCAGA TGAAGTCAAT CGATGTACAA TTGATTTTTT 240  
 GTACCTTGCC ACTGGAATTA CAGGGTTTCA AATTGTATCG CTGGGTGATA TTGAATTCGC 300  
 TGGAGGGATA TTACAnCGAn CAGTTGTTGG GCAACACAAT GGGTATCCAT TTGAACCATC 360  
 GGATGnAACT TTGTGCCGAA GGTGCGCTCC ACATnTAATG 400

## (2) INFORMATION FOR SEQ ID NO: 2972:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2972:

TCAACCGCTT TACAGCCAAC CGGCGACGCT GACATGGATC GCCTGGCCCA TGCCCACGCC 60  
 TTGGCGCCAT CATTATTAAT TGCTGCAGTT ACGGTATCTT TAATTGCGTT AAATAAACCT 120

AAATCACCGA AATGTTATTC GCTTAACGTT TTGTTGTTGT TATTTTAAAA TAAATTTGAT 240  
 GCAATTAGTT TGTTTATCCG CACAACATCT TATAATGTAC TTAAGTGTAT TTAAAGAGA 300  
 5 AAAGAAATAC AGTTAGGCAT TCAAACTGT ATTTAACACA ATTAAGTTGC CTGAATTCGT 360  
 ATTTAAGTCT TATTGAACCT TTTTnAGATA An 392

(2) INFORMATION FOR SEQ ID NO: 2973:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2973:

20 ATTGCAATGA TAGCAATCGG AATCGCACCT GCTAAAATAA ACGTTGTGCC ATCCGTCGCA 60  
 TTTGTACCAC GAATCACAAT GTCACCAAGC GTAGGTGCTC CTATAAATGA TCCAACGGCA 120  
 ACAACACCTA TCGCAACAAC CAAGGCAATA CGAATGCCAC CGATAATAAC CGAAACAGAT 180  
 25 AACGGTAATT CAATCATTCG TAGCACTTGA TTGCGTGTCA TTCCCATACC TTGCCCAGCA 240  
 TCCTTAATAT TCGCATCAAC ACTAGCTATA CCAGTATAAG TGTTTTTATA ATTGGAAGTA 300  
 ACGCATATAA AAACACTGTT AAAGTACTGT TCTGAnCTAG CCTGACTACA TTAAATAGTn 360  
 30 ACATTGCATG ACTGGACTGn TGGATATATT GCATGGATn 400

(2) INFORMATION FOR SEQ ID NO: 2974:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2974:

GTATTCTTTA GGTAATGCAA CTTTAAATCC TTAAATATCT TTACCAATTT CAGATGTAAA 60  
 45 GTCTACATCA TCAACTGGTG CACTTGTAGA GTCATTAACA TCTGCACCAG AAATAGCTTC 120  
 TAATACGATT GCATTATCTT TTACATTTTG AGTCAATGGA CCAATTTGGT CTAATGAAGA 180  
 TGCAAAAGCA ACTAATCCAA ATCGAGATAC ACGACCGTAT GTTGGTTTCA TACCGACAAC 240  
 50 GCCACAATAT GGCAGCCGGT TGTCTAATTG AACCACCTGT GTCTGGAACC TAAGCTAAAT 300  
 GGTACTAAGC CAGCTGCAAC TGCTGCTGCA GATTCCACCT GAnGGAACCA CCTGGGCACG 360

## (2) INFORMATION FOR SEQ ID NO: 2975:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2975:

GAGATCGCGG GTTCGATTCC CGTCGAGACC GTACAAATGC CTATCCAAGA GATAGTTTTG 60  
 TnTTGCGTTT AATATTATAT TAATAAAAGA TATATGGACG AATGATAATC ATATTGATTT 120  
 ATCTGTTTCGT CCATTTTCTT TAAAATGTAT GAACCTCAAG TAACTTAGTG GTTGGATATG 180  
 AAAGATAAAC GTnGACAATA AAATCTTTAT TAGACGTACA AACATATGCT ACTGTCAACA 240  
 TATTTCTTCG TTGTGATATG CCACCAGTCC TCCATAACAT CAATTGTTAA AGTAACGAAT 300  
 AACGAATAAT GATATTTnAT TTCTGAGCCA TGACGTGCCA CTAGAAGTTG CCCATTATCC 360  
 T 361

## (2) INFORMATION FOR SEQ ID NO: 2976:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2976:

TGCTGCTTCT GAAGCGGAGT AATTGTGTAT ATCAAATGTC GCTTTTTGAT CAGGAACATG 60  
 ATGTAAAGGT GTATATGTTT CACCTGTTTG CTCATCATGT AACACGGCAT GCCTATGACT 120  
 GAATGTACCA CGTTCACTAT CTTGACCAGT TAAGCGAATC GGTGTACCAT CTTGTAAAT 180  
 TGTCGCAAAT GCAAGTnGTT CTGCTTGTGC CCAATCAACT AAACCATCTT CTTTATTAAA 240  
 CGGCTCATGA CGCTTCTCAA GAACTTTGTT TAACTTTTTn CAAAATGTTA AAGCCATCCG 300  
 GATATGTAA CAATGCATCA TTATTTCTTT CAAGTGATCC AAAAGTAAAG GnTTGT 356

## (2) INFORMATION FOR SEQ ID NO: 2977:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2977:

CTTTAGAGCG ACACCTAGTC ACTGCAGCAA GCTATTTCTT TATTTGCTAT GCTATAnATC 60  
 5 GTTAATTACT AGACCTATTG CTGGTAGATT GATGGATGAT AAAAATGAAA ATATTATTGT 120  
 CTACCCAGCA TTTATCATGC TTTTCCTTTC ATTTGTATGC TTAATTTCAA GCTATCAAAG 180  
 CTGGTTAATA TTACTTGCTG GTGCTTGCTT AGGTTTAGGG TATGGAAATT TATCATCTGC 240  
 10 AATGCAATCT ATTGCGATAA AAGTCTCACC CCCGATTAAA TATGGTATCG CGACATCTAC 300  
 TTTTACGTT GGTCTAGATG CCAGGTGTCG GCTTCGGTCC AGCATTCTCTT GGGTTAnTTA 360  
 15 CGCAGnGTTT T 371

## (2) INFORMATION FOR SEQ ID NO: 2978:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2978:

TTGTAATTC ATGATTACAC CTCAATTGTT CTTGTTGTTA AAACCTCAATA TTTAATTGTC 60  
 TGCGCTCAAT AATTTGTTGT TTAAGTTGCT CAATATGATT TGATTGGAAT TCTTCCAATA 120  
 30 ATGCTTTTGC TATTTCAAAT GCTACGACAT GTTCGCAGAC GATACTTGCT GCAGGAACAG 180  
 CACAACATC AGAACGTTCA ATTGTTGCTT TAAAGTCTTC TTTAGTATTA ATGTCTACTG 240  
 35 AATTTAATGG nTTATATAAC GTTGAATTG GnTTCATTAC ACCATTACGA TAATTGGCAT 300  
 CCATTGACAT ACCGCTCTA ACCACCTAAG TGATTAGAnC ACGATAATAC CAATTCACTA 360  
 TATAT 365

## (2) INFORMATION FOR SEQ ID NO: 2979:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2979:

TGATTATATA AATCTAACCA GCCAAGTTTC GTCTGCGGTG AGACATTGAC ATTAATTGCT 60  
 GCAGATAATG ATTTAACAAC ATGTGTGGCA TGTGATTCAT TAACGATGAC AATATCATGT 120

TGGCGATGGG TAACATTGTT AACATTGCTT CATTTAAAAC GATATCGAAT TGATTGTCAT 240  
 CAAAGGGCAA TTAAACAGCA TTCGCTTGTT GAACTTGAAT ATATGATTCA nGACCTGCTG 300  
 5 CGGAAATGTT TTCCGTGCTT TTTCTAAGCC TTCnTATTAT ATCAACGCCT GAnGTGACAC 360  
 CAnAGTGTGA GCCAGATAAA TAGAGGTGTG CACAGATACA 400

## (2) INFORMATION FOR SEQ ID NO: 2980:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2980:

TTTCTGCTTT TGATAATCTT TCATCAATGC AAAAGCTACA TTGGACAGTC CTATAATGGA 60  
 AATAATGTTT ACAATTGCCA TTAAGCCCAT AAATAAGTCT GCCGTATTCC ATACTGTTTC 120  
 TGTTTTTACA ACTGCACCGA CAAAGACAAG TACTACAACA AGACATCTAA AGATAAATAA 180  
 25 TATTACACGG TTTGTTGATA AAAATTCAAT ATTAGATTGA CCGTAATAGT AATTACCTAC 240  
 AACAGATGAA AATGCAAACA GTGnAACGCT TATTGGTTAA GAAAATACCT CCAGCAGAAC 300  
 CTAAATGCTC CTTAAGTGCC GATTGGGTAA CTGCAACACC nTGGAGGGCG TTTATCACCA 360  
 30 AATTTnCGTC CCGAATATAG TAAA 384

## (2) INFORMATION FOR SEQ ID NO: 2981:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2981:

AATTCTAACG ATATCACCAT TTTTACAACC ACGTTCTCTA AGCGCATCAT CAATACCCAT 60  
 45 CGAACGCATT TGACGAGCAA ATCGACGTAC TGCTGGATCA CTGTTAAAGT CAGTCATTTT 120  
 AAACATTCTT TCAATAGCAT TACCACTTAC CACATAAGCA CCATCATCAT CTCTTGAAA 180  
 TTGTAAATTT ATCTTGTGAC GGTGTATGTT TATATAATAC TCGGTTAATG CCAACTGACT 240  
 50 CCTCTTCTTC AACTGTGGAG TCAACATCTT TATATTCTTC TGAATTTATC TGCTTATTGC 300  
 ATATGAATAA TTGnnCAATG ATTATCACGC GTTATTGTTG GAAACTGGGA TTAAGTGGCA 360

## (2) INFORMATION FOR SEQ ID NO: 2982:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2982:

CCTCAACCGC TTTACAGCCA ACCGGCGAGC GCTGnACATG GATCGCCTGG CCCATGCCCA 60  
 CGCCTTGGGC nCATCATTAT TAATTGCTGC AGTTACGGTA TCTTTAATTG CGTTAAATAA 120  
 ACCTTCCATT GAAAACACTC CTTAAAATTT AAATTTGAAG ATAACAAAAA CGTGCGTACT 180  
 TThTGAAATC ACCGAAATGT TATTGCTTA ACGTTTTGTT GTTGTATT TTAAAAATAA 240  
 TTGATGCAAT TAGTTTGT TTATCCGCACAA CATCTTATAA TGACTTTAAC TGTATTTTAA 300  
 AGAGAAAAGA AATACAGTTA GGCATTCCAA AACTGTGATT TTAACACAAT TAAGTTGGCC 360  
 TGAATCCGT ATTTGAAGTC CTAATGGAA 389

## (2) INFORMATION FOR SEQ ID NO: 2983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2983:

ATATTCTAT GACAATGTTT AGGCAACGAT TCCAAGGATT AAGAAAAGAT CAACCGGTAT 60  
 ACTTATGTGA TGCCAATGGG ATTGCTAGCT ATAGAGCCGC TCGTATTTTG AAAAAGAATG 120  
 GATATACAGA TATCTATATG TTAAGGCG GCTATAAAAA ATGGACTGGA AAAATAAAGT 180  
 CTAAAAAATA GTTTTTGTAA ATTTAATATA CGATTTAATA AAATCTGAGT GTTAATTGAT 240  
 CATCAATAAC AATACTCAGA TTTTAATTTT TTAACAAAGT CTGTTACTAT ATTTCTCTAG 300  
 CTTCACTGAT CATTAAACCT TAGTTTCAGC ATAATTAAGG AAGGTCCGnC CCATTTCCAT 360  
 CGnGnTCCAT TACCGCCAC 379

## (2) INFORMATION FOR SEQ ID NO: 2984:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2984:

5 ATGCTGAAAA TATGGTGCCG TTTATATGAA TCAATTTGAA TCCGAACATA ATCCGGATAC 60  
 ATATTTTCAT ACATTGGGAC CCGAATTGAC TTCAGCATT A CAGCAAATTG ATTATTTTGT 120  
 GGCTGGTATT GGCTCTGGCG GTACATTTAC AGGTACGCAC GTTATTTAAA GCAACATCAC 180  
 10 GTGCAATGTT ATGCCGTTGA GCCAGAAGGG TCCGTGTTAA ATGGAGGGCC AGCTCATGCA 240  
 CATGACACTG AAGTATCGGT TCTGAGAAAT GGCCGATATT TTTAGAGAGA CGCTGTAGA 300  
 TGGGnTATTT ACGATTAAGA TCnAGATGCC TTTCCGAATG TCAAAGTTTG CTATAATGAn 360  
 15 GGTGTAGTAA GCAG 374

## (2) INFORMATION FOR SEQ ID NO: 2985:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 464 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2985:

GGAGCCACCA TTGGAGCAnG TTACGGTGGA AAAGATACGG nAAGGTnGT ATGACTGTAn 60  
 30 GTCTTGATA GAGTAACAAA CCTAATTTGT TAACTCTAGG CCCCATATGT CGCAGTACCA 120  
 TCTGCATGTG TTGTTAcATT GTATGCATTT GTTTTACTTG GCTTCTTGtA TGTGGGGCGA 180  
 GCTCCGTATG ACACTTGACC GTTTGCAATG GTTGTTACGT TGTATGCATT TGTTTTGCTT 240  
 35 GGCTTGTTTT GTGTTGGGCG AGCGCCATAT GATACTTGGC CGTTTCCATG TGTGTTACG 300  
 TTATATGCGT TTGTTTTGCT TGGCTTGTTT TGTGTCGGAC GAGCTCCGTA TGATACTTGG 360  
 CCGTTTGCAAT GTGTTGTTAC ATTGTATGCA TTCGTTTCGC TTGGCCTCCT GTATGTCGGA 420  
 40 CGAGCTCCGT ATGATACTTG ACCATTGCAT GGGTGGTACG TnnG 464

## (2) INFORMATION FOR SEQ ID NO: 2986:

## (i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2986:

55

AACTATTATA TTAACATACA ATGTAGGGAT GTGATGCGCG TGAAGTTTAG GGATAAAGAT 120  
 AATCGTCAAG TTAATTTGAC ATTTAAAAAG GATAATGAGA TAGCAGATGG CAATCATGTG 180  
 5 CTAGCTATTC CAACGTTTAA AAATCAATTG CTTTTTACCA AACATAATTT ACGGGGGATT 240  
 GAATTTCTCTG GTGGTAAAAG GGAACGCGGG G<sub>n</sub>AAAGTAGT GCTGGAAGCA GTTACACGTG 300  
 AATTATATGA AGAAACAGGC GCCAAATTGA AAAATG<sub>n</sub>TTA TTACATAGCA CAATGT<sub>n</sub>CC 359

10 (2) INFORMATION FOR SEQ ID NO: 2987:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2987:

TAGAATTCTT CTAATGAATG AGCTTCTTTA GAATGATAAC CATAACGAAT TCCGTCAAAA 60  
 CGAGAAAGGT TTGACGAAGC TTCTGATGAT GCAATCACGT AATATGATGG AATACCAAAT 120  
 25 TTAGTATTTG GCAATGATAC TTCCTCAACG ACAGCACCTA AAGATTTTAA AGTTTCTACA 180  
 GCGTTTGTAA CTGCTTCTTT TACGTCATCA GCTACACCTT CACCTAAGTA TTCTTTAGGT 240  
 AATGCAACTT TTAATCCTTT AATATCTTTT ACCAATTTCA GATGTAAAGT CTACATCATC 300  
 30 AACTGGTGCA CTTGTAGAGT CATTAAACATC TGCACCAGAA ATAGCTTCTT AATACGGTTG 360  
 CATTATCTTT TACAnTTCGG GTCATGG<sub>n</sub>CC CATTTTGGTC 400

35 (2) INFORMATION FOR SEQ ID NO: 2988:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2988:

45 ATTCATTGAT AATTATCAAT CCTTTGTGTT AAATTACTAT ATAAATAGTG TACG<sub>n</sub>ATTTT 60  
 CGAAATTTGT GATCATAAGT TTATTCAATG CTAAACAATA AGGTTGAGAC ATAATCGTAT 120  
 CTCAACCTTG AAATTATTAT ACGTTGACGT CACTAGTCAT TCAGTTTCTT TAATGCTGCT 180  
 50 ACAATCTCTT TTTTAGTATC TTGTACTTCA GAAGCTTGCT TAATCACTTT TGCAGGTGTA 240  
 CCAGCAACAA CTGCACCAGC TGGTACATCT TGTGTCACAA TCG<sub>n</sub>GCCACT GGCAACAATA 300

nGATTATAAC CGTGGAG

377

## (2) INFORMATION FOR SEQ ID NO: 2989:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2989:

CCAGGnACCT GGACACGCCG GGTCTTATCA TCAATAATAG TAGCATGACA AATCTACTAT	60
TTTTTCGCTA ATAAGTGGAT GTAATGCTAA TAATGTTGCT GTAGGGAAAC AGCCAGGATT	120
AGAAATGAGC TTCGTTCCAT TGTATCAAA CGATTGCCAT TCTGAAATGC TGTAAATAGT	180
CATGATTCAA ATCATCTTGT GCCTGCAGCA GTTCTTTTGT AATATGCTTC ATATATTTCA	240
CGnTTCTTAA TTCTAAATGC GCCAGATAAA TCGATAACAT GAATACCTTT TTCTACTAAG	300
GGAGGGATAC ATGTTTTACT TACGGGTGCT GGTGTCGCAA AGAAAATTAC ATCAAn	356

## (2) INFORMATION FOR SEQ ID NO: 2990:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2990:

TCATTTTCCA AGTGAGACTC TGCTCTTGCT TTGGCTAATT TAGCTCTTTC AACATCAATT	60
TCTCTTGAGC TTTCTGCAGT CTGAACAATG ATTGAAACTT TATCTTTTCT AACTTCAACA	120
AAGCCATCGC TTACAGCAAT ATATTCAGTT CCATCGTGGA AATTTCACTT TTACAAAGCC	180
TGTTTTTAAA GCAGCTACAG TTGGGAATAT GTCCACTCAT GACACCTATC TCACCAGCTG	240
TTGTTTGCAT AACACGAGT TCAACATTAT CACGATTGTA AACAGAACCA TTAGGAGTGA	300
CAATATCTAG GTTTAAATGT CCATTATCCA TTCCnCCnGA ATTGGnTGA	349

## (2) INFORMATION FOR SEQ ID NO: 2991:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2991:

5 ATGGCCACGT TCATGCCAAT AGCTGTCGTA GTCGCATTTT CACGTTCTAG TATTGCATTT 60  
 TTAAATGCG ATGTGTGCTC TACATAACGG CAAATTTTAA GTTTATGAAT CAACATATCA 120  
 ATTGCTTCGT TTCGAGACAT GTCGTGGATC AGTAATTATC ATAGTTTGTT GATCAAAAAC 180  
 10 ATGAGAAGGT TTATTGAGAT GTGAATGTTT CGCGGTGTTA TCTACATTGT CAACCTCTGT 240  
 ATCATGTTGT GTAATATCTG TATCATGAAG TTGCGTTTGC GCTGGTGCAT CTA CTGCTAT 300  
 AACTGGTGTA TTGCGTTTTA ATAATAGTAC AGTAGTnCAT TGTnGACAAG ACTnACCGAC 360  
 15 TTA 363

## (2) INFORMATION FOR SEQ ID NO: 2992:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2992:

AAGTTTATTT TAAATTCGT AATAAAAATA ATAACTCAT CGAACGATTT AATGGTCTAG 60  
 30 GTTTCATAT CACTATGAG TACATTAAAT TCAAATTCGA ATCAGGTAAC GTAAAAGATC 120  
 AAACAATCCC TGAATAAAC ACCAAGCAAA TACCCTACAG TACATCATTG GCATGTATTG 180  
 TGGGTTTTTC TACTTTTTGT AAATATTGAn AATTATnAGT AGTTGTTTTT TACTATTAGG 240  
 35 GCAGAATGCT TTACAATAAC ATGCAAGTGT CAATTAAGGG GAGCACTTGC ATAAATAGTA 300  
 TAGGnGAGTG AGTAGTCCTG GCCATTTCTT GGAATTCCTT AATCGGCAC 349

## (2) INFORMATION FOR SEQ ID NO: 2993:

## (i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2993:

50 TTTGTGCAAT AAGCGCTTTT TGTTGTTTTG CTTTGTGTC TAATTCATCT TTCGCAACAT 60  
 CTTTAATTGT TGTATCTGCA GTAATACCTT GAATATCAGC AACTGCTTGA TCTTTAATTT 120  
 GCGTAACATC ATTAGTTGTT TGTGCATTTA AGATATCTTG ATACGCTTTT TCTTTAGCTT 180

TTGCTTGATT TTGAGTTGTC ACAGCTTGAT CAACATCATT TTTAGCATTG ATTTAACCGC 300  
 TGTGCTGGTT GCGGCTTGAA TTGAATCTTC CAGGCTTCGC TGA CTACACA TACACAGTGA 360  
 5 GnGnAATATT TCGGCTGAAC GCGTGCATGT GAAngCTCT 399

## (2) INFORMATION FOR SEQ ID NO: 2994:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2994:

AATGACAGGA ATCGTCGTTG CCTTTACTAA TTGACCAGTT AATTCAAAGT TAGGTCCGGA 60  
 20 CATTTTGCCA TCTTTAGCAA TATCAGTATA TATAATGCCG CCAAGAGGTA TATCCGATAA 120  
 CCGTCTCACA AACTAAATAA ATTTAACTCT GTGTCCTCTT CCCATCCGTT CACTTTAATA 180  
 TCTTCTCCAT AGGCATCAAC AGATAAATAA ATGCGACCTG GAAATGTATG TGCCATCTCT 240  
 25 TTAAGCCAAT CAGTATCTTG AATACCTTTC GTTCCAATA TGCAATAAAT AATCCCTGCG 300  
 GCAAAGTAGT CCATGATTTG TGA CTT 326

## (2) INFORMATION FOR SEQ ID NO: 2995:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2995:

CTAATGCCGA TGAGCAAAAC ACAAGCATTG GAAATTATTA AAAAAGTTAG GTACGTATAC 60  
 AACATTGATT TTGATAAACC GAAGTTAGAA ATGTGGATTG ATGTATTAAG TCAAAATGGA 120  
 45 GATTATCAAC CAACTGTAAA AGCGGTAGAT GTTTATATCA ACAGTAACAA CCCGTACCCG 180  
 CCTAACTTAC CAGCAATCAT GCGTAAGGAA CCTAAAAAAG TATCTATCGA GCCAGTAGAT 240  
 AACGAAACCG CTACACACCA TGGGAAAATG CAGAATGACC CGAATTGTCA GACAAGGAAA 300  
 50 ATAGCGCTAG ATAGTTCATG AATAGTTGGC AGATTGGGGC GAACGATGAT ACGnCATTCG 360  
 ATTGAAGTCA TATCGTCGTA CTTAACACCG GACGTTnGAA 400

## (2) INFORMATION FOR SEQ ID NO: 2996:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2996:

10 GAATGTAAGT GTCCCTTAAG CATAGTGCTC CCACCTTAAA TTTTGTTACA TACTTTTCATG 60  
 GAATGTACGA GAAATTACAT CTAATTGTTG TTCACGTGTT AATTTAATGA AGTTAACAGC 120  
 GTAACCAGAT ACACGGATGT TAACTGTGGG ATATTCTTCT GGATGTTCCA TTGCATCTAT 180  
 15 TAATGTTTCA CGGTAAATA CGTTAATATT TAAGTGGTGA CCACATTGCA TTGCGTAACC 240  
 ATCTAACATA CTAGTTAAGT ACGGTTTGAT CTCTGGnTCT TTACCTAATG ATTTGGnACG 300  
 ATACTGATGT ATTGAAATAC CATCCTTACA GCATCGTAAG GGGTCCTAGC CACAGAACTT 360  
 20 ATGAAGAAAT GCACCTTTTn GGCACnGGCA TGCATGGGGT 400

## (2) INFORMATION FOR SEQ ID NO: 2997:

25

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2997:

ATGATATTAA CCTGTTTACA AGATGGTTGA TACTTGCGCA TGAnATTTGA ATCTTCAACA 60  
 35 CCATATTATT ATGGTACATA CGAAACTGAA AATGAATCCA TAGTTACTGA CAAAGAAAAA 120  
 ATCTTAGTAT TAGGCTCTGG ACCAATTCGA ATCGGCCAAG GTGTAGAATT TGA CTATGCG 180  
 ACAGTTCACG CCGTTTGGGC AATTCAAAAA GCAGGGTACG AGGCGATAAT TGTGAATAAC 240  
 40 AATCCAGAnA CAGTTTCAAC AGATTCTCAA TTTCTGACAA ATTATACTTT GAACCTTTAA 300  
 CTGAnGAGGA TGTGATGAAT ATCATTAATT TTGGA 335

45

## (2) INFORMATION FOR SEQ ID NO: 2998:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2998:

55

GCAGTAACTA ACTTTTGTAC AAAAGGATCA TTTTATCAA CATAATGTGG TGGTTGGACT 120  
 TTACCTAATT TCACTTCAAA GtATTGTTGA ATCTCATTTG CAAAACGATC CATAGCTTTT 180  
 5 TCAAATTCAA ATCCTTCTGG GTAGCGTAAt TGATACCGAA AAGACCTGCG TTTTCATTAT 240  
 CATATGTAAT AACACCAATG TTAGTTGTCA CGTCACCCAT GgACATCTGT ATGGgAATTT 300  
 CATTCCCAnc TTTTTCACCA AAATCnGGAA TTGAAATAAG TGAGCGATTA CGAAATGGCG 360  
 10 ACAAACGCCT GTGGCATTGA TnGAGCAAGA TTnAAGG 397

## (2) INFORMATION FOR SEQ ID NO: 2999:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2999:

AAAGCTGTGT TGGTAAAGAG TTTTGTGCAT TTGGTACGCA ATACACGACA CGACTTGGCA 60  
 25 TTCGTTTAGA AAAACATTT GAATACATCG ATACACCTCA TAAATTCAAA ATGGGTGTAT 120  
 CAGGCTGCCC AAGAAGTTGT GTTGAATCAG GTGTAAAGA TTTTGGTATT ATCTCAGTTG 180  
 AAAATGGGAT TCCAAATCTA TATCGGTGGT AATGGTGGTA CAGAAGTTGA AAAAGCTGAA 240  
 30 TTTTAAACAA CTGTAGAAAC AGAAGATGAA GTAATCAAAT TATGTGGTGC TTTGATGCAA 300  
 TATTGAnCGC GAAACAGGTA TATATGCnGG AAAGAACCAG CGCCCAGGTT AAGAAGACCT 360  
 GGATTTGAAA ATGTnAAAAG AAGTCCTTAC CTGGGCCCCG 400

## (2) INFORMATION FOR SEQ ID NO: 3000:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3000:

AACGGTAGTA TTACAGAAAG CTCTACTTAT GGTGATAATG ATACACCAGC GCCACCAACT 60  
 GACGAATTAG GTGGTAGTTG GACACTATGG AAAAATTTAG CGCGACAAAG TCCTGAATTT 120  
 50 GGTAATCCTG ATAAGTTTTG CCAAATATT CCTAAAAAAA GTTGGTTTGT TTCAGCAACT 180  
 TCTACAACAA ACAATAAAGA GATTATCGAT ACAATAGAAA GTATTTGTAA ACGTGACCCA 240

AGTTTTACAA TCAATCGTCA GcMACAGTTT aAAGACCAaC CTGrAAATGA AaTATCTACA 360  
 TGGATTTATG CCTTATATyC AGATGTAAaC GGCGATTATA TTAAAAAGCC AATTACAGAA 420  
 5 TGTAGTGGTA ATGAAATATG CCAAGnATGG CTGTATCnCT TnGGTGTATC AACTGACAAG 480  
 ATTGAAGACT TAGCAAAACA TGCCTC 506

(2) INFORMATION FOR SEQ ID NO: 3001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3001:

20 ATTGATGGCA TCGAAAAACT TTAATAAGAC AACAAGTTGA TGAGATATAT GTATATAGGT 60  
 TTGGCATGGA TTTCGATTGC AGTTAATTAG AATAGCTCAA TGCTATAAAT GTAAGTAGTT 120  
 GATATGAAGA AACTAATGAA CTAAATGCAA GTATTGTCTA AAACAATCAT TTTATTGAAA 180  
 25 TTTAGTAGAG CTGAAATTAA TATAACGTCG TTAATTGAAT AACGCTTATG TTATAAGAGC 240  
 ACTCATACCA nACCATAATC ATCTATAGnT ATAACAATTC ACGTATAAGG GGCTGTGTTT 300  
 GGCATAGCCC TTAGGTATAC ACCTAATTCC CATTAAAATA GTAGGGGnTT AAA 353

(2) INFORMATION FOR SEQ ID NO: 3002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3002:

CAACAAAATG TCTATATGGT AAGTGGTAA ACGAAAAATG ATGAAGACTA TTCATCAACT 60  
 ATTTTATATA ACAACGAAAA AGAATTACAA AAAATTACTG ATGCTGCTAA AAAGCAAAAC 120  
 45 GGTGTAAAAT TAACGATTAA AGAAGAAGAA AAACAAAGTG TCTTTGTGAG TATACTTTCA 180  
 ACATTAATTC CAGTTGTAGT CATAGCGTTA TTATTTCTTC TCTTCCTAAG CCAAGCACAA 240  
 GGTGGCGGTA GTGGCGGTCG TATGATGAAC TTTGGTAAAT CTAAAGCAAA AATGTACGGT 300  
 50 GATnAATAAA CGTCGTGTTT GTTTCTCTGA TGTAGCCAGG GGCCAGATGn AGGAAAACCA 360  
 AGGnTTAATT GGAAATTGTT GGTTCCTTGG AAAGGTAATG 400



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3003:

ATAACATCGG CACAGCAGCT AAAATAACCA TACCCAAAAT GAnTGTATCT TTAAACGTGC 60  
 ACCGTAAAGn CTTCCGACTA GCCATGTATA AGCTTTGGCA GCAGATAATT GCTTCGTTGT 120  
 AATGAGTAAT CCTTGGACAA GCGCAATAAA CAACGTTTGC ATCGAAATAC CGATGATTAT 180  
 GAGTGTGTGC GGGCGTATTT GTCCTTTCGT TTGAAACACT AATAGTATCA TCATTGCAAC 240  
 TCGCCACCT AATACTGCAA ATAGTGGAGT AAATGTATTG TTAAAGGCTG AAAATGCAAT 300  
 AAAGACAACA GCACTTAAGC TAGCACCACC TGTGATACCG CTAATATCAG GTGAGGCCAA 360  
 TGGnnTTTT TTATACATTT TGGCAACATT TAACCACTTC 400

(2) INFORMATION FOR SEQ ID NO: 3004:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3004:

CTAATAACAA ATGCGATGAT GATTAATACT AATTACCTG CTGCTAATAC AGAATCTCCA 60  
 AGGAATGAGA AGAATGGTTG ACGTTCAACT TCATTGTTTT TAAGACTGTA GATAATATCT 120  
 TCTTTCTCTT CAACACTTAC TGGATTCAAC AAGCATGACA CAATAATCGC GTTAACGGAT 180  
 ATTTAGTGGA ATTGCCGTTA GTACCAGTTC TCCTGGTACC ATTTGTACAT ACGCACCTAC 240  
 AATAGCTCCC GATACAGAGC TCCATTGACA TCATTGCGAT TGTTAATACA CGCATTTTCAT 300  
 TnCAGACGTT TTAGTTGCTC ACTTGGATAC GGGCTAAngC TnCGTGAAT TGCC 354

(2) INFORMATION FOR SEQ ID NO: 3005:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 378 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GGTCAGCTTA TTGAACAAGG GACACGTGAA TCAGTCTTGC ATCATCCAGA ACATGTTTAT 60  
 ACGAGATTTA TTATCAACGA AGAAGAAGAT TAATGATCAT TTAAACATG TGATGAGGGG 120  
 5 TGATGTACAT GATTAAAATT AAAGATGTTG AAAAGTCATA TCAAAGCGCA CATGTTTTTA 180  
 AGCGTCGTCG AACACCTATC GTGAAAGGTG TGTCAATTGA GTGTCCAATC GGTGCGACGA 240  
 TTGCGATTAT CGGAGAAAGT GGTACGGnTA AATCGACGTT TGAGTCCTAT GATATTAGGT 300  
 10 ATTGAGGAAC CGGATAAAGG TTGTGTACCC TTAAATGATC CACCGATGCh TAAGAGGAAG 360  
 TGAGCCGCCA CChATTGG 378

(2) INFORMATION FOR SEQ ID NO: 3006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1785 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3006:

25 AChTTAGTTG GCCAAGCCTT TATCCGGAAT TATTGGGCCT TAAAGCCCCC TTAGGCGGTT 60  
 TTTTAAGTCT GATGTGAAAg CCCCGGCTCA ACCGTGGAGG GTCATTGGAA ACTGGAAAAC 120  
 TTGAGTGCAG AAGAGGAAAG TGGAATTCCA TGTGTAGCGG TGAAATGCGC AGAGATATGG 180  
 30 AGGAACACCA GTGGCGAAGG CGACTTTCTG GTCTGTAAct GACGCTGATG TGCGAAAGCG 240  
 TGGGGATCAA ACAGGATTAG ATACCCTGGT AGTCCACGCC GTAAACGATG AGTGCTAAGT 300  
 GTTAGGGGGT TTCCGCCCCCT TAGTGCTGCC AnTAACGCAT TAAGCACTCC GCCTGGGGAG 360  
 TACGACCGCA AGGTTGAAAC TCAAAGGAAT TGACGGGGaC CCGCACAAGC GGTGGAGCAT 420  
 GTGGTTTAAT TCGAAGCAAC GCGAAGAACC TTACCAAATC TTGACATCCT TTGACAACTC 480  
 40 TAGAGATAGA GCCCTTncTT CGGGGGACAA AGTGACAGGT GGTGCATGGT TGTCGTCAGC 540  
 TCGTGTCTGT AGATGTTGGG TTAAGTCCCG CAACGAGCGC AACCTTAAG CTTAGTTGCC 600  
 ATCATTAAGT TGGGCACTCT AAGTTGACTG CCGGTGACAA ACCGAGGAA GGTGGGGATG 660  
 45 ACGTCAAATC ATCATGCCCC TTATGATTTG GGCTACACAC GTGCTACAAT GGACAATACA 720  
 AAGGGCAGCG AAACCGCGAG GTCAAGCAAA TCCCATAAAG TTGTTCTCAG TTCGGATTGT 780  
 AGTCTGCAAC TCGACTACAT GAAGCTGGAA TCGCTAGTAA TCGTAGATCA GCATGCTACG 840  
 50 GTGAATACGT TCCCGGGTCT TGTACACACC GCCCCTCACA CCACGAGAGT TTGTAACACC 900  
 CGAAGCCGGT GGAGTAACCT TTTAGGAGCT AGCCGTCGAA GGTGGGACAA ATGATTGGGG 960

TATATTCGGA ACATCTTCTT CAGAAGATGC GGAATAACGT GACATATTGT ATTCAGTTTT 1080  
 GAATGTTTAT TTAACATTCA AAAAAATGGG CCTATAGCTC AGCTGGTTAG AGCGCACGCC 1140  
 5 TGATAAGCGT GAGGTCGGTG GTTCGAGTCC ACTTAGGCCC ACCATTATTT GTACATTGAA 1200  
 AACTAGATAA GTAAGTAAAA TATAGATTTT ACCAAGCAAA ACCGAGTGAA TAAAGAGTTT 1260  
 TAAATAAGCT TGAATTCATA AGAAATAATC GCTAGTGTTT GAAAGAACAC TCACAAGATT 1320  
 10 AATAACGCGT TTAAATCTTT TTATAAAAGA AAACGTTTAG CAGACAATGA GTTAAATTAT 1380  
 TTAAAGCAG AGTTTACTTA TGTAAATGAG CATTTAAAAT AATGAAAACG AAGCCGTATG 1440  
 TGAGCGTTTG ACTTATAAGn ATGnnnGATA TGTGAATAT CCATATCTAA AGCTAGATCT 1500  
 15 AAACTTTGTT CAAATCTTC AATCGTCTGT TTCGGTAAAT GATACATTAA ATCTAAACTG 1560  
 ATTGATTTAA TACCTGCGTT TTTAGCATT AACACCGAAG TGTAAATATC TTCAGTATTG 1620  
 20 TGCGTTCTAC CTAAACAGA CAATAACTCC GGCTTGAATG TTTGAACGCC CATTGAAATC 1680  
 CTTTTTACTC CATATTTCTC TAATAGTTGG ACTTTCTCTT TAGTTAACTC ATCAGGATTT 1740  
 GCTTCAAATG TATACTCGCC TGTGATTGTA AACGTATCAC GTATT 1785

(2) INFORMATION FOR SEQ ID NO: 3007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3007:

TGCAAAAAAC ACAATAACGA TAAATGTTCC CATTGATCCT ACAGCATCGC GAACATTTTA 60  
 CCTAAGTCTT TTGTATTTTT AATTTCTTTG CTAAAAATCC CATAAACTAA TCCAGGTACT 120  
 40 AAAAATACGA CAAGAATAAT TAATCCGACA CCGTTAATTA ATGGCGATCG TCTAGTAAGC 180  
 TGCCTGTTTT AGCATTTCTT AAAAAGCTAT GTCAGGAATG GCTGTAATAA TTAATAAAAT 240  
 AATTGnGCTA TGAAGTATA TTTGCCATTT TAAAAATGT GCTCTTTGTC AGAATATGTG 300  
 45 AGATGTnCTC ATGGCATCAT GCATTAAACT GCATCATATT TTCCTAATCT AGGATAATGA 360

(2) INFORMATION FOR SEQ ID NO: 3008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3008:

TTGCCTTCAA ACACATACTT GTAGTCGGAT GATCACCTGT TCCAAAAGnC ATACCTGGGT 60  
 5 CGAGCTCAAT GCAAAGCTCT TCATCCGCTT CTTTAGCATA TGTTTCCCAA CTAGGAACTA 120  
 TTGTGAACTT CTTGACGCT CGGGAATGGA TGGAAATAGT TTTTCCATT C ATTTTCCCAA 180  
 TCCGTCTCTG CAATAATTTG CTCACTGAAT TGAACGTTAT GTTGATCAAG TTCATCTAAA 240  
 10 TTTAATAACT CATCTTTGAA TTTGCTGTCG CAACTGTATC ATCATAAGTG CATTTTCAGTA 300  
 AAATAGGCTT nGCAAnCTTA CTCCCTTATC TGGGATAAAG CCTCGGTTTT 350

## (2) INFORMATION FOR SEQ ID NO: 3009:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3009:

TCTTATATCA CCAGGAATTA ACACTGCCTT TTGACCACTT TCTTCAATCA CTTGGCGTAC 60  
 TTCTTG TGCA TCTTGTTCTT CACTCGGAAG ATAGTTAATC GCTACATCTG CACCTTCTTT 120  
 AGCATACGCA ATTGCTGCTG CACGCCCTAT TGCTGAGTCA CCACCTGTGA CTAAtATTTT 180  
 30 ATAGCCTTGT AAGCGTTGAT GACCTTG GTA AGACGTTTCG CCACAATCGG GTGCTGGCGT 240  
 CATTTTCAGAT TGTAACCCG GTACCTCTTG TTCTTGTTTT TCaTAATCCG TTGTTTTAAA 300  
 TTTTGTTChA GGaTCTkGAG CkGCCAtTTT TtGACaYcTc CGTATnCGCT TAATGGGTAT 360  
 35 CATTTACCCC AATCTTCCTA AGG 383

## (2) INFORMATION FOR SEQ ID NO: 3010:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3010:

TAATTCAACG GGAATTTTCC CTTTGAAGTT AACATAACGG TAGGCTGCTT TAACAGCTTC 60  
 50 ATCATCGGGC GCTTCGACAT CTTCTAATTC ATATGCAATG CCCAATGTTT TCCAATTATG 120  
 AACACCTAAC TGATGATATG GCAGAATTTT AAACCTTTTCG ACGTTATCAA GAGAATTAAT 180

TGTCGAATCC ATACCAGGTG GTTTCATATC TGACAGTTTG CGCGCGAAGT TAAAGGATGT 300  
 GTGTATTAGG GCTTTCCCGG TCCATCCAAA TAnGGTTGGT CCATTAAATCC ATAAGGTTTT 360  
 5 AnAATCnAAA TAATAATCCA GTCCGGTA 388

(2) INFORMATION FOR SEQ ID NO: 3011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3011:

ACTGCTGTAA CGTCAGTTGA TCTTTTCATT CTTGGTTTAA TTTCTGAGAC GTTACTTGGT 60  
 20 TGnGcnAnGC CACCAATTGC CATACCGACA GATTGGAAGA ACAATGCATC AGTTCCACCA 120  
 ACACCAAAGA TGTCACCAAG TACAACGAAA CCTACATATC CAACTGTAGA TACAATTAAA 180  
 ATACCCATTG CTTTTTTAAA TTCAGGATTA TCTGATTGAC GTnCATTTTT AGCTTTAAGT 240  
 25 GAAGTAAGTG CTACACCAAG AACTAATAAT ATCATGGCGA TTAAACCAAA GATAATTTGA 300  
 GTCATTGAAG ACCATTACCC TAAAAAGATA ACGCTGGAAT AATGGTGTAC CCAACTAATT 360  
 GGCATACCTG GTAGGAAACT GGGCATAGGT ATTTGGATAC 400

(2) INFORMATION FOR SEQ ID NO: 3012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3012:

TTATCGGATT CGTTAATACT GGCGGTTTAC GCAATAGTTT AGATGTAGAT GATAACAATG 60  
 TGCCTATTAA ATTTAAAGAA GAGTTCGAAC CTAGAAAGTT TGTTTTCACT AACGGCGAAA 120  
 45 TTAAATACAA TAGCAATTTT GAAAAAGAAG ACGTACCGAA TGCATCAAAC CAACAAAGTG 180  
 CGTCAGATTT AAGTGATGAG GAACTTCGCG GAATGGTTGC GAGTATGCAA ATGCAGGTGG 240  
 CACAGTAAAC GTATTAACAA TGGGATTAGC TCAACCAAAC GCTATGTTAA CACCACAGTT 300  
 50 GACTGACTGG AAACCTACCA ACCAGTACTG AGGGGnCGTT AATAATGAGT GTTTCCACTT 360  
 AAGCATAAAC TTTTGTTGGT CTTAAACGGC ATTAGTGTCTG 400

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 389 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3013:

GGCTGTAATG AAAATCCAAA AGCCAAGCTT ATTTAATTCG CCTTCATGTG TGCCTGAATC 60  
 AATAGTGTTC GTATCATGAC TCATGACTTA CAGCCTCCCT TTCTTTAATA CGCGCTTCTC 120  
 TTAATCTAGC TTCAGTTTCT GCAACTTCAG CAGCAGGGAT ATGATATCCG TGATCGATTT 180  
 GGAAACTGCG ATAAATCATA GTACCAAAAA TACCGAATAA ACAAATTAAT GCTGGAATTA 240  
 CAGTTTCGAA AATTAAGAAG AAACCGCCGA TAGTCATAAA GATACCAATC CAGAATCCAA 300  
 CAGGAGTAAT GGTTCGGCAT ATGGATGGCC TTGGnAATAA TGGGTTGnCC TAAGTAATGG 360  
 CCGACCAAGG TCCTTTCCAn ATCCACCAA 389

(2) INFORMATION FOR SEQ ID NO: 3014:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3014:

AATCGCTTCG GTTAACTGTT CTAACCATTC GTAATAACA TGTGTATGAT CAAGCTGAGC 60  
 TTTAATTTTT TGTGCCTCTT GTGTTTCAGC TTCAGTTAAA TCACTGCTTT CAAGTAATGG 120  
 ATTGATAATA GCTTGAGCAT CTTTTACTGC TTCGACATTG ATGTCAATTT CACGCTGGAA 180  
 TTTTITAGTG AAAAAAGTTTC GGAAAAAGAT GAAAAAGTCT TTCTCGGCGA TAAATGTGT 240  
 TTGCGGCTCC TCTCGTAAAT TGTGGTTAAC AATATCAAAT TCCTGCAATT CCTAACGCAG 300  
 CACTCATACT nGTTGnCnCAT TGCAATGATG ACGCATTAC AGGGCAACTG CTCAACACAT 360  
 GGGCATAAAG TTCCCACTC ATAGGCAACA ATCATGGCGG 400

(2) INFORMATION FOR SEQ ID NO: 3015:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3015:

nCCTATCTCT GGTCGAGAGT CTTTGAGCTG AAAAATGTGA CACACAAAAT TGCAATGGnA 60  
 5 TCAACAAATG TTTCCCATG TGGATGGTCT TGAATAAGTA TTTGGTGTTT AACTTGGTGA 120  
 TTTGCCATGA CTAATACCAT GTCATTTGTA CTTGTATCGC CATCAACAGT AATCATATTA 180  
 AATGTATGGT CAGTCGAAGA TTTTAATAAT TGATGAAGTG TATTCGATTC AATCGATGCA 240  
 10 TCGGTTGTGA TAAAAGCAAG CATGGTAGCC ATATTTGGGT GAATCATACC TGAACCTTTG 300  
 GTGCTACCAC CAATTGTAAC GGTTTACCAT CGATTTTAGT GATACAGCGA TATGTTTTGT 360  
 ACAGGTATCA GTGTAAAAA 379

## (2) INFORMATION FOR SEQ ID NO: 3016:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3016:

CATATAAATT GCTAACGTGC CACCATTCAC TAAGGAATTG ACATCCACTT CATTTTCTTC 60  
 TGAATCTTTA AAGTGACCTG TAGAAAAATGT CACACTTTTA GCAACTGTAC GCATTGTCAA 120  
 30 ACCTGTCTGC ATAGTAGCAA CTGCTGCGCT CGCTGATGTC ACCCCTGGTA CAATTTCAAA 180  
 CGCAATATGA TGTTCATTTA GTATGTCGAC TTCTTCTTGC ACACGACCAA ATATCGCTGG 240  
 ATCGCCAACT TTAAGTCTAA CAACCTTGTT ATATCGACGC GTGCTTCCAC GATACAGTCA 300  
 35 TTATTTTTCT GGCGGAAAAT GTTTGGAAAC GGCTTTTACC AACAnGGTAA TTCAGAGGCA 360  
 ATCGCAATGn AAATTACGGn TCACnAACGG TCATTGGATG 400

## (2) INFORMATION FOR SEQ ID NO: 3017:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3017:

CCTTTTTCTC TTCTTTCATA TCTGCAAACG TGCATCAATT TTAGGATCTA AATCTCCAAA 60  
 TGCTTCTGCA ACTGGTTCAG AGCGTTCATA ATACATACGA ACTTTTGGAT ATAACGCTTT 120

TCATTTAACT GTTCATCAGT ATATTTATCA TATGCTTTTG TTGCTTGTTT TAATTCTGCT 240  
 TTAACACCAT CATCTTTTTT CGATGTCTTT GAATCATCCT TCTTACTATC GTCGTTCCCC 300  
 5 ACATGCAGCA 310

(2) INFORMATION FOR SEQ ID NO: 3018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3018:

TCGCTTTGTA AATTCTGGAA CAAAGnCAGT CATGACAACA ATTCGTGTTG CACGTGCATA 60  
 20 TACTAAAAGA AATAAAATTA TAAAATTTGC TGGATCTTAT CATGGCCATT CTGATTTAGT 120  
 ATTGGTTGCA GCAGGTAGCG GCCCATCTCA GCTCGGTTCT CCAGACTCAG CTGGTGTTC 180  
 AGAAAACGTC GCACGTGGAA GTCATTACTG TACCTTTCAA TGATATTAAC GCCTATAAAG 240  
 25 AAGCAATTGG AATTTTGGGG TGATGAAATT GCCGCAGTAT TAGTAGAACC AATTGTTGGT 300  
 GAACTTTGGG AATGGnnAAT GCCTCAACCT GGGATTTTTTA GGAAGAGGGT 350

(2) INFORMATION FOR SEQ ID NO: 3019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3019:

ATATCATGTG CCAGTGAAAG CGGCACTGGn CGGATATGGC GCACATATGG ACATTATGAA 60  
 AGAGTACCAA TTAATCATTT TAGCGCCACA AGTTGCGTCT AACTATGAAG ATATTAAGCA 120  
 AGATACAGAT AGATTAGGTA TTAAATTAGC GARgACTCAA GGTGCTGAAT ATATCAAATT 180  
 45 GACACGrGAT GGCCAAGCAG CCCTTGATTT CGTTCAACAA CAATTTGAAA ATTAAGAATA 240  
 GGAGTTTTTC ATATGACTAA AACATTACCT GAAGGATTTT ATTTTTGGTG GAGCAACAGC 300  
 AGCATATCAA GCAGGAAGGT GCGACCAAAT TACGGGATGG GTTAAAGGTC GCGTGCATTG 360  
 50 GGGATACGGT ATTTTAGGAA GGAAACTTA TTTGGTACCA 400

(2) INFORMATION FOR SEQ ID NO: 3020:



- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3020:

10 ACGTTCGTCT TACGTTTAAC GCCATACGGT GTATTAGCAA TTATGGnCCA ACACATTATC 60  
 GACAAGTGAC TTTGGCGCCA TTTGGACTTT AGGAAAAATT CTTAATCGCA TCGTACGCTG 120  
 CATTAATTAC GATGTATATC ATTCACTTAA TTATTTTAAG CCTGTTAGGT ATTAGCCCAA 180  
 15 TTCGCTATGT TAAAAAGACT TTGGAAGTAT TAATCTTTGC ATTCACATCA CGCTCAAGCG 240  
 CGGGTGCCTT ACCAATGAAT GTACCAACAC CAACCAGACG TCTAGGCGTG CCAGAAGGTA 300  
 ATGnCAATTT CGCTGCGACA TTTGGAATGG CGATTGGACC AAATGGGTGG GCAAGnAATT 360  
 20 A 361

(2) INFORMATION FOR SEQ ID NO: 3021:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 356 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3021:

CAATGACCAT GACCAGTTGA TTTGGAACAA TGATTGACAT TGGAGCTATG CATCAAGTTT 60  
 35 GTCTTTAAGA CTACTAAACC CACGAACCAT GTTAACCCCG TGGTGCACCA TCACCAATTG 120  
 nCTCGATCTA ATTCAGTTAA TTCAGATTCA TGTTTTTTAA ACGTTTCTTC TAAATTTAAT 180  
 AAACGTGnCT TTCATATCAT TCACTTTCAT TTGTGnCCAC CTCATAAATG TATATTATCA 240  
 40 TATTCACTCT TATTAAAGTA TGA CTGTTGT TGGTGTCTAAA AATGCTCCAA ATATTCCGTT 300  
 TATTAGGCAC GATAGTTATA GAAAAACCTG ACAGTCTAAA GATGTCATAT AATCAC 356

(2) INFORMATION FOR SEQ ID NO: 3022:

45

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 332 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3022:

55

GTGTTTGGTC CAATATCCAT ACCTTCTTGG nTCTGCTGGA ATTGAATCAG ATGGTACTAC 120  
 AGTGATTTTG GCATCATTAG nAAAAATTCTT TAGTCAACTT TAGTGTCTAC TGGTAATACA 180  
 5 ATTTTATCAC CATGTTTTTC TAATAAATCT TTTGCGAGTC GGATTTTATC TTCTTCTAAT 240  
 AATGAAATAC CAATTTCTTT ACCTTGCGCT TTTAAGAAAG TATAAGCCAT ACCTCCGCCG 300  
 ATGATAATTT TATCAGCTAT GTTAACTAAT AA 332

10 (2) INFORMATION FOR SEQ ID NO: 3023:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid

15 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3023:

AAAGGTATTC CACAAGAATT AGCTTTGCAA AAATGCCAAA GCAAACAGAA GATGGnACAA 60  
 TTTAAAGTGn CCTACAATCA TGAATGAGGA GGACGCGTAA GATGAGCATT CGCTACGAAT 120  
 25 CGGTTGAGAA TTTATTA ACT TTAATAAAAG ACAAAAAAAT CAAACCATCT GATGTTGTTA 180  
 AAGATATATA TGATGCAATT GAAGAGACTG ATCCAACAAT TAAGTCTTTC TAGCGCTGGA 240  
 TAAAGAnAAT GCAATCAAAA AAGCGCAAGA ATTGGATGAA TTACAGGCAA AAGATCAAAT 300  
 30 GGATGGCCAA T 311

(2) INFORMATION FOR SEQ ID NO: 3024:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3024:

ATTAGACATT ACAAGGTGCA GTACGTGCAA CATATTAGAC ATATTGAATT AAGTGGTCAT 60  
 45 GnAAGGTATT GACAGTTAAA AAAGTTGAAC AATTAGAAGA AATCGAGGGC TTAATATTAC 120  
 CTGGTGGCGA GTCTACAACG TTACGTCGAT TAATGAATTT ATATGGATTT AAAGAGGCTT 180  
 TACAAAATTC AACTTTACCT ATGTTTG GTA CATGCGCnGA TTAATAGTTC TAGCGCAAGA 240  
 50 TATAGTTGGT GAAGAAGGAT ACCTTAACAA GTTGAATATT ACTGTACAAC GAAACTCATT 300  
 CGGTAGACAA GTTGACAGC 319

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3025:

GGTGCCAAGC AATAAATATG ACTATGCTCA AACTGAATTA ATGGTGGGTG TGTCGCCATC 60  
 GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA AGGTAGCATA 120  
 TGTAATTGTT TGTGTTTACG TATTTCTGGT GGTAAGTTCC GTGAAACCCA ATGTCTATAT 180  
 TCCCATTATA TACGCTATTT ATAAATGTGT CATGTTCTAA TAAGCTCGGT ATGACATGTG 240  
 TATCATTTTG TAAATGAAC GTTTGGATAA GGGGAGTAA CATGTGGGAT ACGTCACTCT 300  
 CATCAAGCCA TGTAGATACn 320

(2) INFORMATION FOR SEQ ID NO: 3026:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 328 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3026:

TCTCAACAAA TGCATCCAGT ACTTAAATTG GCATTATAGT AATTTAAGnA CAATATATCA 60  
 ATATTTCTCC TTATCCAGCA ACAGCAAATT TATTGGTAAG GTGTACGATT GAACCTTTAG 120  
 TCAATGAAGC AGGTACATTT GGATTGGCCA GGTGGATTTA CTTCAACTGA GCGCTTTGTG 180  
 AGAATGGGCA TTTATGAAAG CAAACATTGC TCAAAACAAT GATAAAGAAA TGGATTTAAT 240  
 GAATGCATTT TATTTATTAG ATGCGGTAAA TATACCGATT GGAATTGTAC GTCCGCATGA 300  
 TGCTGACAAT CACTATACGA TGTATCCA 328

(2) INFORMATION FOR SEQ ID NO: 3027:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3027:

ATTGAAAATA TGTGTTCTnT GTAAAATTTT AATCGTTTCGC CACGATGCTG TTGATAAAAA 120  
 TTCAAAAACCT GGAGTTGATC TTCTAGTTCA ACATAATCAT CGTAATTAGA CATGTAACCT 180  
 5 TTGATTAAGA TTTCAAGTAC ATGATCTTCG ATAGTATTGn TTTTAACTTG TTGTTGAGCC 240  
 GCTATATCTT CCATCGTGGA ATTGTTCAAG CAATTTTGTA TAAGTAATAT AAGTTTCGATT 300  
 TAATGAATGT AGGTTTCATT AT 322

10 (2) INFORMATION FOR SEQ ID NO: 3028:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3028:

CAAGAATCTT ATACTTATCA AAATTTATAC TGTGAAGCGA GTCTATTGGC TAAAAGACTC 60  
 AAGGCTTATC AACAACTCTG TGTGGGGCTA TACATAGATA ATTCGATTCA ATCGATCATT 120  
 25 TTAATACATG CATGTTGGTT GGCAAATATT GAAATTGCGA TGATTAATAC AAGGnTGACA 180  
 CCTAATGAGA TGACGAATCA GATGAAGTCA ATCGATGTAC AATTGATTTT CTGTACCTTG 240  
 CCACTGGAAT TACGAGGGTT TCAAATTGTA TCGCTGGATG ATATTGAATT CGCCnCnCCGG 300  
 30 GcNTATTACA ACG 313

(2) INFORMATION FOR SEQ ID NO: 3029:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3029:

CTTCCAAAGA AAAGACCACA GTTTTTGACG CATCAATATG GTGCAATTTT AGAGACACTG 60  
 45 TAGTTGCAGA AGATGGTTCA GTTGGACTTT GAAGACAATC GTTATACAGA AACACGCGTG 120  
 CCGCTTATCC AATTAATCAC ATTGACAATA TTGTAGTACC ATCTAAAGCA GCACATCCAA 180  
 ATACAATTAT TTTCTTAACT GCGGATGCAT TTGGTGTTAT TCCACCGATT TCAAAGTTAA 240  
 50 ATAAGACCAG CAATGTATCA TTTCTTGAGT GGTTCAC TTC TAAATAGCTG GnCAGAGCGT 300  
 GGTGTGACAG ACCTGACCAT CATCTCAACA TGTTCGnGCA CCGTCTTCCG TACATCnACT 360

## (2) INFORMATION FOR SEQ ID NO: 3030:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3030:

```

TGATGGATTG GCTAGCAGGT GTTTACATTA ACTCATTAAG TGTTATTCAC TACATGCACG      60
ATAAATACAG CTATGAACGT ATTGAAATGG CATTACATGA TACAGAAATT GTACGTACAA      120
TGGCAACAGG TATCGCTGGT TTATCAGTAG CAGCTGACTC ATTATCTGCA ATTAAATATG      180
CACAAGTTAA ACCAATTCGT AACGAnGAAG GTCTTGTAGT AGACTTTGAn ATCGAGGCGA      240
CTTCCCTAAA TACGGTAACA ATGACGACCG TGTAGATGAT ATTGCAGTTG ATTTAGTAGA      300
CGCTTCATGA CTAATTACGT GGTCAATTAAG CATATCGTGA TTCAGACCTT CCATGGGnGT      360
ATTACCATTA CTTCAACGTG GTnTCGGGTA GAAACTGGGT      400

```

## (2) INFORMATION FOR SEQ ID NO: 3031:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3031:

```

nGCGTTTAAT CACATCTTTT TGATAATGTT CCCTTACCAT TTCTTCATGT GCATCTGCAT      60
AGTCTTTTCC AAATGGCAAA CTAAACTGAT ATGCAACTTT TAAATAGGCA TCTATATGCG      120
ACTCGTCAAC GATGGCAATT TCAACGTChA GTTACGCGGA CAAATTGGCA AGCGCATCAC      180
TTTCTATGGC ATACAATTCC ATAATACCTA GTTCAAAATT CATATCTTTA AAACATAGCC      240
ATCCAATGGA TTATCAAGTT GTTCATTTTC CGGGAAAACT nAAACGCATA AATGATTTGG      300
AACCTTGATT TGTATGTGA      319

```

## (2) INFORMATION FOR SEQ ID NO: 3032:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3032:

5 AAGAAGTGGC AATTATGATT GATGCTCTAG CTGACAAAGG GAAAAAAGCA TTAGAAGCAT 60  
 TATCTAAAAA GTCACAAGAA GAAATTGATC ATATTGTTCA TCAAATGAGC TTAGCAGCTG 120  
 TTGATCAACA TATGGTGCTA GCAAATTAG CACATGAAGA AACTGGAAGA GGTATATACG 180  
 10 AAGATAAAGC GATTAAAAAT TTATACGCTT CTGAATATAT ATGGAATTCA ATAAAAGACA 240  
 ATAAGACAGT AGGGATTATT GGTGAAGATA AAGAAAAAGG ATTAACGTAT GTAGCGGAAC 300  
 CAATTGGTGT TATTTGTGGT GTTACCGCCC AACCACCAAA TCCCTACGTC CGACCACCTA 360  
 15 TTTTAAAGC CGATGGATTT GCCATTTAAG ACnGGGAATC 400

## (2) INFORMATION FOR SEQ ID NO: 3033:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## 25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3033:

TAGCGGTAAT CGAAATTGGG GACTAAATTT CGCAAAAGCG GGTGCGACGA TATCAGAAGA 60  
 30 GTATAATGTC CCTTTATTAA TGAAGTTTGA GTTACATGGA AAAAACAAG ACGTTATTGA 120  
 ATTTAAGAAC AAGGTGGGTA ATTTTAATGA AAACCATGGA AGAGAAAAAG TACAATCATA 180  
 TTGAATTAAA TAATGAGGTC ACTAAACGAG AGAAGATGGA TTCTTTAGTT TAGAAAAnGA 240  
 35 CCnGAGCTTT AGTAGCTTAT TTAGAGGAGT AAAnGACAAA ACATCTTCTT CGACACTGAA 300  
 TCG 303

## (2) INFORMATION FOR SEQ ID NO: 3034:

## 40 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3034:

CTnCGCTATT TTGTAGGACA TCTTCTAAAG TGCTAGGnGA AGAGATTATA GAATAGGCAC 60  
 50 TATCAATACC GAAATCGTAA ACATGTTGAT AATTTTCGCC TAGACTGCCA CAAATCGCGA 120  
 TGACAGGAAT ATGATATTGT TTTGCAGCTA ACGCAACGCC TGACGGGTGT TTTACCAAAG 180

TGATGAAAAT CTGTAATGTC AAAGACGGAC ATCAATGACT TTTGTTGAAA GTTGTCTCAC 300  
 AAAACGnTAA TGAATGCTGC GGCCCATGAC CGGCCAGCTG 340

(2) INFORMATION FOR SEQ ID NO: 3035:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3035:

AAAGAACATG GTGTAGCAAT AGTCTCTGGA GGTGGAAGCG GACATGAACC TGCGCATGCC 60  
 GGTTTTGTG CAGAAGGTAT GCTAGATGCA GCGGTTTGTG GCGAGTATTT ACATCACCTA 120  
 CACCTGATAA AATATTAGAA GCTATTAAAG CAGTAGATAC TGGTGATGGT GTATTACTAG 180  
 TTGTAAAAAA CTATGCAGGT GACGTGATGA ATTCGAAAT GGCACAAGAG CTTCCAGAAA 240  
 TGGAAGGTAT AAATGTTCAA ACTGTTATTG TTCGTGnCGn CATTGCTGTG ACAAACGnGT 300  
 ACA 303

(2) INFORMATION FOR SEQ ID NO: 3036:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3036:

GGGGAAAGTA AATTAACAGC TGTGTAGAAT AATTAAGGTT TTAATTTATA TAGAACAACT 60  
 TATTGTAAAC TTTTCATTC TTAAAGTTTA CAATGGTGCT ATAATAATGG TCATGAAATA 120  
 CGAAAGGAAG GAAAAAATGA CnACAAAACA GTTAGTATAT ACAGCTTTAA TGACAGCGAT 180  
 TATCGCTAGT TTAnGATTGG TACCGGTAAT TCCACTACCA TTGnCTTCAG TACCAATTGT 240  
 ACTTCAAAAC AGTGGTATTT CTTAGCAGGG GCGATTTTAG GACGTAAATA TGGCACATTA 300  
 AGTGTTATCG TCITT 315

(2) INFORMATION FOR SEQ ID NO: 3037:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3037:

5 GCACCAATTG ACGAAGGAAT ACCGAATCCC ATTGTTTCCTA AACCACCGCT TGTAACCCAT 60  
 TGTCCTGTGAT TTTTAAATGG ATAAAATTGA GCTGCCACACA TTTGATGTTG TCCCACGTCT 120  
 GTAGTAACAA TTGCTTCACC ATTTGTAATT TTGCCGATAT ATTGATTGT TTGTTGTGGC 180  
 10 TTACAAAATA CTTGATCTTC TTCACCAAGT TTAAATGGGT GTTTCTGCTT ATTATTTTGA 240  
 CAATGTTTAA CCCAGTCACT GTGTTCTATA GTCTCAACAT TTTTATCATT TAAACCTCC 300  
 AAAAAACCTT TACAnGCCnG CAAAAAACC 330

## 15 (2) INFORMATION FOR SEQ ID NO: 3038:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## 25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3038:

GTGAGTCCAC ATAATAACTT TGACGTCCTG TTAATGTTCT AAAAGGTACT AGACGTTCTA 60  
 TATTCGTTGT AAATGGTGAA TATCGTCGAC CTTGTTTATT TGAACCTGGG AATACTGCTG 120  
 30 TCGGTATTAC TTCTCGTGGT TGTGAAGTTA TATTTAAAAA CGAAATTTTC TCAGCAGCGC 180  
 TGTCGCTAGA AATATCTTTT AACGGCATTC CAGTTTGTTT TTCGAGATCT TCATATGGAT 240  
 TTTTGTGnAT AATTnACCAT TCGTAGCAGA TGGAAATACT TGAGTATnGG CATCAGCGAC 300  
 35 ATTGACGTGC TGTATCAATA CGTGGACGAT TCGC 334

## (2) INFORMATION FOR SEQ ID NO: 3039:

## 40 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3039:

GGTCTGATCG TGGTGAATGA AAAAGGTTCT TCTCTGTAAT GAATTATCTC TTACCGATGC 60  
 50 AAGATATTAT GAGCATGCAT TGCTCAGCAA ACGTTGGTGA AAAAGGCGAT GTTGCAATTAT 120  
 TCTTTGGTCT ATCTGGCACT GGTAACAA CTTTATCGG CTGACCCACA CCGTAAACTA 180



ATGCAAAAGC AATTAATCTT TCCAAAGAAA AAGAnCCACA GntTTTTTGA CGCATTCAAA 300  
 TATGGTGCAn TTTTAGAGAA CACTGTA 327

(2) INFORMATION FOR SEQ ID NO: 3040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3040:

GTGATATTCA CGAnCGTTAT TTTCAATATT TGATAAGTAG AAAnTATGAC GATCTTCATG 60  
 AACAGCATCT TGTTCTTCGT CAAATTCAAC GTCATCAAAA CGTTTGAAGA ATGTTTCATA 120  
 TGCATCAACA GATACTTCAG TACGGTTATT TAATAATGCT TTATGTGCAG CTTGGATCTA 180  
 AATGATCTTT GTAGCCTTCA ACTnAATGTC GCACTATAAA ATTCACCAAC TGAACCTGAG 240  
 CCATAACTGA ATAAACCGAT TGTTTCCACC AGCTTGTGAA TCTCGATTTT CAAGTGAATG 300  
 ATATT 305

(2) INFORMATION FOR SEQ ID NO: 3041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3041:

GTTGTGTACC TTAAATGATC AACCGATGCA TAAGAAGAAA GTGAGACGTC ATCAAATTGG 60  
 TGCTGTATTT CAAGATTATA CGTCATCATT ACATCCATTT CAGACTGTTA GAGAAATCTT 120  
 ATTTGAAGTG ATGTGTCAAT GTGATGGACA ACCTAAAGAA GTTATGGGAA GTCCAAGCAA 180  
 TTACATTGTT GGAAGAAGTC GGTCTATCTA AGGCATACAT GGATAAATAT CCTAATATGT 240  
 TATCAGGTGG AGAGGCGCAA CGTGnTGCAT nTGCGCGTGC AATATGTATT GAACCCnGAA 300  
 ATATATTTTG TTTGGAT 317

(2) INFORMATION FOR SEQ ID NO: 3042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3042:

5 AATCTTCGAA AAATAATGCA ATGCAGATTC CGAAAAAAC AATATGATAG AAACACCTCA 60  
 ATTAAATACA ACGGCTAATG ATACATCTGA TATTAGTGCA AACACAAACA GTGCGAATGT 120  
 AGATAGCACA ACAAACCAA TGTCTACACA AACGAGCAAT ACCACTACAA CAGAGCCAGC 180  
 10 TTCAACAAAT GAAACACCTC AACCGACGGC nATTAATAAAT CAAGCAACTG CTGCAAAAAT 240  
 GCAAGTTCAA ACTGTTCTC AAGAAGCnAT TCTCAAGTAG GTTATTAAAA CACGGATGGT 300  
 GCTAATAGCT TnGCAACAAC GTGGGCTTTA AAATTCTCCA ACTTTAGTTT T 351

## (2) INFORMATION FOR SEQ ID NO: 3043:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3043:

25 ACGnCTTAC TGGnTACTTG GTTGATAAGT GTTAATCCAA ATGACGTCCT GCTACGTACA 60  
 GCTTTACGAA TATTTAATGC ACGTGTGATA TTTTGAGAAA ATACACCGCC TGGCTAAACC 120  
 30 ATACTCAGAA TCATTAGCTA TATCAATTGC TTCTTGATCG TCCTTCACTT TAATCACTGT 180  
 TAACACTGGT CCAAATATTT CTTCTTGTGC TAATTGTGA TGATTGTCTG GCACnCAATT 240  
 AATGTCGGCT CAAAGAAGAA CCCTTTATCT AATCCATTTT CAGTTAAGCG ATGACCGCCT 300  
 35 GCTAAAATTT GTGCATCCG 319

## (2) INFORMATION FOR SEQ ID NO: 3044:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3044:

45 GTCATATAAT CTAACATTTG TGTTATCTGT TAATTAAGTG GnTTTTACCT TAATTTGTTA 60  
 50 CATTGnTCTG TATTAAATCT TTTTGTAACC ATTGGTTACT TTTTCAGGTG GAATTTCAAC 120  
 ACCCATGTCA CCACGTGnCA ACCATTAAAC CATCAGACAC TTCAAGAATT TCCGCAATAT 180

AAATTCACGA ATTTCTAAAA CATCACTAGG TACGACGTAC GAAACTTGCT GCAATGAAGT 300  
CAACATTTTC TTTAATACCG AAACGGATAT CTTCAGCATC TT 342

5 (2) INFORMATION FOR SEQ ID NO: 3045:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3045:

TAATATCATG TTGTGCTTTT AGTGCTTCGG CAATTTGTTT TGTACTTACT GACCCAAACA 60  
 ATTTACCACC TTCACCAGTT TTTGCTGATA CTTCAACTTC AATGTTTGAT AACGTTTCTT 120  
 20 TTAATGCTTT ACATCTTCAA TTTCTTGTTG GCGTTCTTGT TTTGCACGTT TTTTCTGTAA 180  
 CTCTAATTGT TTAAGGTTAC CTGGTGTTGC TTCTACAGCA TAATTCTTTT TCAATAAGAA 240  
 GTTATTTGGC ATAACCTACT GGTACTTCTT TAACTTCACC TTTTTTACCT TTACCTTTAC 300  
 25 CTTTAACAnC TGTGTAAAAA TTACTTTCAT GCAGnTCACT CCTACTTAAA TGTTCCGTAA 360  
 TGCCTGTTGT AATGTGCCAA CGCCnCTCGA CGTGACACCT 400

30 (2) INFORMATION FOR SEQ ID NO: 3046:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3046:

40 AATCACTGTT TCATTACTTG TTCCAAATCT GnATTCAAAC TATTGTTCAA AGATTCTAAT 60  
 TCCGCTTTAT TTTTATCTTT AATCGCTTTT GTCATCGCAG CATCTTTAGn CATCGACTTn 120  
 CTGTTGCAAT AGTTTAATTT TAGAACCCGC ATCTTTACTA GCCAATTCTT CTTCATAAGC 180  
 45 AATTAATGAC TTCGTTAATT GCGAAAGTGT ATCTTTTTGA TTATCAATCG CTTTTGCATC 240  
 TTCAAGCTTT CTCACATCTG CATTGACAG CATTACTTGC ACTATTATCT TCAAGCGATA 300  
 50 ATTTCT 306

(2) INFORMATION FOR SEQ ID NO: 3047:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3047:

ATGGATCATA	TTAGCACGTA	AAAGAAAATT	CTGTTTCTTA	TGAAGAAGTG	CCAGAnGTTG	60
AATTTAAACG	CACATATGTA	TGTGAAGATA	TGTCTAAATG	TATTTGTTTA	TACAACGCAC	120
CTGATGAAGA	AGCGGTAnTC	GCGCGCGCAA	AGCAGTTGAT	ACACCGATTG	ATGGCATCGA	180
AAAACTTTAA	TAAGACAACA	AGTTGATGAG	ATATATGTAT	ATAGGTTTGG	CATGGATTTC	240
GATTGCAnTT	ATTAGAATAG	CTCAATGCTA	TAAATGTAAG	TAGTTGATAT	TGAGGAACTA	300
ATGAAC						306

(2) INFORMATION FOR SEQ ID NO: 3048:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 287 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3048:

GACAGGCTAC	GAGATATTTT	AAACAAATTT	ACATCAAATC	CAGTATTAGG	TGTTATTGCA	60
GGTATCGTTG	TAACATTTTT	AATACAAAGT	AGTTCAGGTA	CGACATTATC	ACAATCGGAC	120
TGGTAACnCT	GGATTTATGA	CATTGAAACA	AGCCATTGGA	GTGATAATGG	GTGCTAATAT	180
CGGAACAnCG	GTAACATCAT	TTATTATCGG	TATAGATTTA	GGCGAATATG	CAATGCCAAT	240
TTTAGCATT	GGTGCACTCT	TGAATCTTTT	TCTTTAAACG	CTCTAAA		287

(2) INFORMATION FOR SEQ ID NO: 3049:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3049:

CATATAAATA	GCGnTACATC	GCGCCATTCT	TGATCTGnAC	ATATCTTTCT	TAGGTCCAAC	60
CGTGAATGAT	TACGTCCATG	ATAACGTACA	AACGCAATTT	CATTTGTGAT	TCGATTGACT	120
AAAGGTACAC	TGCCATCTTT	CACTTGTGGT	TCATCAACTA	CTGCATGAAT	GATTTGATGT	180

55

AATTCTACAC ACATTGGAAA GCTTGTAATG CTGTCTTACA TACAAATATA TTGATATTTG 300  
 TGCATGCAGT CAACCAGGCG GAAATGACCA TACCATGCTA ATTTTCTGGT AnGAAGGCCT 360  
 5 ACATATCTAA A 371

## (2) INFORMATION FOR SEQ ID NO: 3050:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3050:

CGCCAAATAA AGATAATACA CGTATTGGTG AAGATATAAC TGTAAGTGCA CATATCTTAA 60  
 20 TTGATGGCGA AACCAACGCCG ATTACGAAAA CAGCAACATA TAAAGTAGTA AGAACTGTAC 120  
 CGAAACATGT CTTTGAAACA GCCAGAGGTG TTTTATACCC AGGTGTTTCA GATATGTATG 180  
 ATGCGAAACA nTATGTTAGG CCAGTAAATA ATTCTTGTCG ACAnATGCGC AACATTGAAT 240  
 25 TTCCAATTTG TTGGAnCATA TGGGCTAACA AGGTGTTTAG GCATATCTAC TCGTCTTATT 300  
 GGGTGCATAT GTAATGGCAA GCA 323

## (2) INFORMATION FOR SEQ ID NO: 3051:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3051:

CCGnACCAAT CGGTTTACAG TTCATTGGTA AACCATTTCGC ATGAAAAAAC GTTATATCGT 60  
 40 GTCGCTTATC AATATGAAAC ACAATACAAT TTACATGACG TTTATGAAAA ATTATAAGGA 120  
 GTGGAAATCA TGCATTTTGA AACAGTTATA GACTTGnGTT CACGTAGAGT TAAAAACGGA 180  
 45 CTCAAAAATG TTTCTCCATC ACCAGCGCAT TThGAGCAGA ACCTAACTCA AATACGAATG 240  
 GTATCGCTTA GCATATCCAG TGCTTACCAG TTGTTAATAA GCGTGCGTAG ACGGGCATGC 300  
 50 GTGCTGCAAT GCCTAAATAG GAACG 325

## (2) INFORMATION FOR SEQ ID NO: 3052:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3052:

CTTTTAATCG CTTGAAAAC	ATAGGTAAGA CAATACAAGT	AGCTACAAAG CCATATATTA	60
CTGTTAATTG ACCTATGAAA	AAATATCCGC TAACGGGTGC	CGTCAATCCT GCGATAGCAA	120
TACCAATAAA AAGTACAGTC	CACGAAGGAT AAACATTTTC	AAGTGAAAAA TCTTTTAAAT	180
ATTTTATTGA AAAAATAATC	ATATGCGTCA TAATTCCCAC	AAGGCATAAA ATCCAAATAG	240
GCGTATTAAG CTATTGTAAA	GTTTGTTACT AAAAAATGTT	TTAAATAGTG TnCTAAAAAG	300
CCGGCATGAA AATGTGTGAC	CTGATGAACT GAGGCTGTTA	TTGTCTTCAC TTATTAAATT	360
TGTCTAGTCT AAAGGTGATC	CAATCAGAAG CAAGTCCGCA		400

20

(2) INFORMATION FOR SEQ ID NO: 3053:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 367 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3053:

AATGAGATGC GAAGGATGAT	CAGAGAAAAA GTCTCTCAAT	CAGGTGTGAA AGTCAGATGG	60
TTATCACAAC TTTGGCGTAC	GTTTTCGATA TAATGCACTA	GGTGATTTAA ATACGAGCAA	120
TATTGTTTCT TCAAAAGAAA	GTTTCGGTAT TACTGAAGTG	TGAAATCTGT CTCTATGCAT	180
GCCGGATCGA CATTAGCATT	ACTAATCCAG AGAAAGCAAA	AGGTATTGTG TATACACCAG	240
AACATTGCCA GCGAAAAGTA	AATGGTCACA GCTGTAGAnC	AAGGTATTTA TAATGGGGGC	300
GGTAAAGCAG AAGGCCCTTA	TGTAGCATTT CnTAAAGnTG	GGAAAAGGTA AAGCAGCATT	360
ATCGGTG			367

45

(2) INFORMATION FOR SEQ ID NO: 3054:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 382 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3054:

55

TnATTTATCT nAGCTCATGA CATGATGGCT GTTCACATTG CAAGGCGTTG ATGATnAAAT 120  
 AAGGAAAGGC ATTAGGAAAA AGCCACAGGG AAAACATTTT AGCAGCAGGT TCTTGGAATC 180  
 5 ATATATTCAA GTTCAACAAG CGAATGCTGT TAAATTGCCC TTTGGATGAC AATCAATTCG 240  
 ATATCGTTTT AAATGAAGCA ATGTTAACAA TGTTACCCAT CGCCATAAAG GAAAAAGCAT 300  
 TACGCGAGTA CTACCGAGTC TAAAGCCTGG GGGTATCTGT TAACACATGA TATTGTCATC 360  
 10 GTTAATGAAT CACATGCCAC AC 382

(2) INFORMATION FOR SEQ ID NO: 3055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3055:

CTTAAGATTA GGTGTGCTTA ATTAGTACTG GCTGGGAACG ATAAAGGCAT ATTGCAAAAA 60  
 25 ATAGAACATC CATATCCATT AAATGTATTT ACGCTAAATA TTGnCGACTT ATATTTTTTAG 120  
 ACATAGAGAA GAGACAAGAC AATTTTTTAAC GATGCAACGA CAGTTAGGCT GAGGCAGTTA 180  
 AAACAAATAT TTGATACACA TGTTGnCAGA TAAAAGTCAG TGTTCCCATC AAATGChAAT 240  
 30 TTTGTACTAC TAAAAGCTCA GCAGCGCAAC AATTAGGACA ATACGTATAT GAACAAGGGA 300  
 TTAAACCTC GCTTTT 316

(2) INFORMATION FOR SEQ ID NO: 3056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3056:

GTTCACCATC CGTTTATTTT AATGAAAAAA TCGACAAAAA TGGTCGTGAA AACTATGATG 60  
 CAACAATTAT TCCAAACCGT GGTGCATGGT TAGAATATGA AACAGATGCT AAAGATGTTG 120  
 TATACGTACG TATTGATAGA ACACGTAAAC TACCATTAAC AGTATTGTTA CGTGCATTAG 180  
 50 GGTCTCTCAAG CGACCAAGAA ATTGTTGACC TTTAAGTGAC AATGAATATT ACGTATACTT 240  
 AGAGAAAGAC nGCACTGAAA AACTGACCA GCGTATTAGA ATCATGACGT TACGTCCAGT 300

CTTAGCAGCG TGGGnCGTAT

380

## (2) INFORMATION FOR SEQ ID NO: 3057:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3057:

TATGTGATGG ACTTAAAAAA ACGAACTCAA TTAATACAAT GGGCTCAAGA AAAAGAAGAA 60  
 CGATTTATTA TAGAAGATGA TTATGATTCC GAGTTTAGAT ATTTCCGCAA ACCCATTTCCA 120  
 GCAATTCAAG GTCTATATTC AAGAGGAGAA AAAGTGATTT ATATCAGTAC ATTTTGCAAA 180  
 GTCTATTTTT CCTAGCTGTT CGAGTTGGCA TATATGGTGT TACCCTATTC TATnATGGAA 240  
 AAAATATCAT TTCTnCAAAA TCCACCATTG GAAGGGCAAC ACTGGTAACC TGTTTCATAT 300  
 GGCAAAACCT TATTGGCAAC GTTTnAT 327

## (2) INFORMATION FOR SEQ ID NO: 3058:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3058:

CGAAAAAGGA GAATGAAACA TGAGGTAATA CAACATTACA TGCAACAACA ATTTATGCGT 60  
 GTAAGACATA ATGGAAAGCA GCTATGGCTG GAGATGGGCA AGTAACGCTT GGTTCACAA 120  
 GTCATCATGA AACAAACGGC AAGAAAAGTG CGACGTTTAT ATGAAGTAAA TGTTAGCTGG 180  
 TTTCGCAGTA TGTAGCAGAT GCGTTTACTT ATTTGAAAAA TTCGAAACAA nATTACAACA 240  
 GTTTAGTGGT AACTTAGAAA GAGCnGCTGT TGAATTGGCA CAAG 284

## (2) INFORMATION FOR SEQ ID NO: 3059:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



AAAGAAGCGG ATGAAGAGCT TTGCATTGAG CTCGACCCAG GTATGGCTTT TGGAACAGGT 60  
 GATCATCCGA CTACAAGTAT GTGTTTGAAG GCAATAGAAA CATATGTATT GCCACAGCAT 120  
 5 TCAGTAATTG ATGTTGGTAC TGGCTCAGGT ATATTAAGTA TTGCAAGTCA TCTAATCGGT 180  
 GTAAAACGTA TTAAAGCGTT GGATATTGAT GAAATGGCAG TGAGTGTAGC TAGAAGAA 240  
 CTTCAGAAGA nATCATTGTG AACGTTGAAT TGGAAGCTGT TCCAGGTAA CATATTGGAA 300  
 10 AG 302

## (2) INFORMATION FOR SEQ ID NO: 3060:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3060:

TTTTTAAnGA CACATTGnGC TGTGTTTAAT GCATGAAAGG AACCCTGAC ATGCATnAAA 60  
 25 TCTTTGAATG GTTCTTTATC AATTCCTTCC CCCCTCTCAT GTTTTGTATC TTAAATCAA 120  
 TATAATTCAA AAAGGGTCGA GGATATGAAA TCACATCTTC GACCCTTTAT TTACTATTTT 180  
 AATTCAGCCA CACGCAAACG GTTATTTGCT CTCTCTAAAG CTCTTTCGGC TCTATGGAAT 240  
 30 ATCAGTATTG TCGTCAATCA TTTTCCAAGT GAGACTCTGC TCTTGCTTTG GCTAATTTAG 300  
 CTCTTTCAAC ATCAATTTCT CTTGCAGTTC 330

## (2) INFORMATION FOR SEQ ID NO: 3061:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3061:

CGATCAATCA ATATAATTCA CGGCGCAAAA CGTTTATTTA GCATGTTCTT GCAGACTCTG 60  
 AAAGTGGCAT TAAACCTTCC ATTAAGATTT TTACCATTCT AGGCATTAAT ACCATTACTG 120  
 CAGCCATTGA CATTCTTAA TTAATGATGT CTCCAGGTTT GTAACCTGCT AAACACACCAA 180  
 50 TACCTAAmCC TAAATTAAG CCGACAAATA TAGACTCTCC AAATGCGCCA AAACGTTTTT 240  
 GAATTGnTTC AGGATCAGCA TCTAACTnAT TCAGACCGGG TACTTTTTGT AACAAATTTAA 300

## (2) INFORMATION FOR SEQ ID NO: 3062:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3062:

TATAAAATCA ATGATTTTAA CAAATAAAAA CGTACCGCAA ATACTGCAAA TAACAGCAAA 60  
 TACTAGTTTT AATAAAATAT GACCGGTTGG AAAGAACAAT AAAGCAATTA AAATACCTAG 120  
 TTTAGCCCAT TCCATCGTTC CAGCTGTAGT CGGACTAACA AACTTATTTT GCATCATTTG 180  
 TTGGCATTAT CAAGCCTGCT GAAAGCCAAC GAACTTCCAG CAATTAAAAT ACTCATCGTC 240  
 CTTGGTATTC GGGCTTGGAG AATAAAATGA TTCCGCTGGT GACTCAGTTG AAATGTAGTG 300  
 AAATCTTTGA ATTGGATAGT TnCACTGCAC ACCTGATGGn AnCAACGGAA 350

## (2) INFORMATION FOR SEQ ID NO: 3063:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3063:

TTAGTGATTT TAACGTGTAT CGGTAATTTT AAATAAATGT TTAATGCTTT TGAAAATACA 60  
 GTTCTAACCG AAGACGTCGG GTACACTGAA TCACCGGAAA CGCCAAGGTC TTTTATTAAA 120  
 CCTTGTTTAC TATATTGCAT ATACTGTGGA TGCTGTCGCA ACACATTGAT TTGATAAGGA 180  
 TGTGTTGGTA ATAAAATAAA ATCTTTGGGT ATCTCTGATA TATCTATGTC TGCTAATTGG 240  
 ATACnACACT TTCTCAACCT GGATCCTTCC TTTTACCTnC CACCATAGCC GCGTGGAncA 300  
 GGAAACCATC CTGGGATGCA CCAGCCAAAA TAAATGCCAA TT 342

## (2) INFORMATION FOR SEQ ID NO: 3064:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

GTCCAGCTCC AGAACCAAAC TTAACAGTAT TATGGTCAGT ACGTTTACCT GACAACTTCA 60  
 AAACATACTG TGCAAAAATG AGTATTAAAA CAAGTTCTAT CCAATATGAA AATGATGACA 120  
 5 TTATGCGTGA AAGCTATGGC GATGACTATG GTATCGCnTG TTGTGTATCA GCGATGACAA 180  
 TTGGTAAACA AATGCAATTC TTCGGTGCAC GTGCGAACTT AGCnAAAACC TTACTTTACG 240  
 CTATCCATGG TGGTAAGATT GAAAATCTGG TGCACAAGTG GGCCCAACCT CCGAGGGATT 300  
 10 nACCAGCGGA GTAATT 316

## (2) INFORMATION FOR SEQ ID NO: 3065:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3065:

TGATTGCGTG GATCAGCAAC TTCAAAGATT AACAAATAAT ATTACTTGGG CAGATAACCG 60  
 25 CGCTGCAAAA TATGCAACAG TAATAAATGA AGTGCAATGAT GGGCAATGCG ATTTACCAGC 120  
 GnACAAGCAC AnCGGTTTCA TCCTATGTCG CCATTAGCGA AGATTTTTTG ATGAAACATG 180  
 ATGGCCAGAT GTATTTCCAC GTACTGCTAA GTTTGCAGAT ATTAAAACAT ACATTTCTAT 240  
 30 CATTATTGAT ACATATATCA TTGATTATTC CATGGCTTCC GCnACAGGGA TGTTAATTAG 300  
 AACATAGATT GGAGTGAGGC AT 322

## (2) INFORMATION FOR SEQ ID NO: 3066:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3066:

TATAAAGAAT CCTGCCTTAC CTAAGAACAC TTGTCTTGTC GTTAAGACTG ACTCTAGACT 60  
 45 CTTATGTTTA TTATCAACCG TTAATAAACT TACCATCAAG AGTGACCTA CCCATACTGA 120  
 CAGTGCAGTA TAGAATGGTG TCATACCTGA ACCATAATCC TTAAGTGGGA AAACATCAAC 180  
 50 AGTCTTCTTA TTAATAGATT GCAATAATAC CCGCTGCTTT TTCAAATCAT TCTAnTGGTC 240  
 GATTAATTGT CGACGCATCA TCTTGTCAAT TCTTGAAATT TATTCGCTTT TCAACTTTCA 300

CACGCTGACA TAC

373

## (2) INFORMATION FOR SEQ ID NO: 3067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3067:

TTCAGAGTTC GGAACATAAG GCGCTACAAT GTTGTGTTGC CAGTAGTTGA CTGAATATGC 60  
 GTTTGTAAACA AGCTTTTTTC GATTCTAGTC AACAGTAATT AAATTTATGA TATGGGCAAT 120  
 ACTTTGTAAT ACTAATATTA AATGGCGACT TTATTTCACT ATGTTATAAG AGTGCCATTT 180  
 GTTGATAAAG GnATACTAAA GGGTATCGTT TGGAATTTTA GTAAC TAGAT ATGTTCCGGT 240  
 ATAGACCGnA TTGTGGATAC GTAAATTTAA TGnATGAAT TTTAAAATGA AAACATGACA 300  
 TTAAATGAAT C 311

## (2) INFORMATION FOR SEQ ID NO: 3068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3068:

TATGATTATC TAGTAAGTAA ATTGCTGACG CGCCGAATAC CGCAAAGAAT ATAAAGCAAA 60  
 CTAACGCCGG GACAAAAAGT ACACCTAGGA ATAAATTCTT TAATCGTACG TCCTTTTGAC 120  
 ACACGTGCAA TAAATACCT ACAAATGGGT GCCCAGGnTA TCCACCATGG CCCAGTAAAA 180  
 GATTGTCCAA TTTTGTAACC ATTGGGAATT TTTGACCACC TGTCGGAATG CGTAAACTCA 240  
 TACTTAAAGA AATTTGCATT ATAATTACCT AGACC 275

## (2) INFORMATION FOR SEQ ID NO: 3069:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

AAATGGGTTC TGTGACATTA ACGTCTACAA AAGATGGTTC AGAAGAAACA CACGAGGCTG 60  
 ATGGTGTATT CATCTATATT GGTATGAAAC CATTAAACAGC GCCATTTAAA GACTTAGGTA 120  
 5 TTACAAATGA TGTTGGTTAT ATTGTAACAA AAGATGATAT GACAACATCA GTACCAGGTA 180  
 TTTTTCGAGC AGGAGATGTT CGCGACAAAG GTTTACGCCA AATTGTCACT GCTACTGGCG 240  
 ATGGTAGTAT TGCAGCnCAA GTGCAGGGAA TATATTGACA TTAACGATCA GCCTAAntCC 300  
 10 GAGCnGATTA GATGTGAGCG G 321

## (2) INFORMATION FOR SEQ ID NO: 3070:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3070:

GTTTGACCTG CATATTTGAC AGTCATAACC TTTGTATCAC CATTATATTA ATATCAAAAT 60  
 25 CTTGGAACGT GTTATTTGAG nTGACATTTA ACTTCGCAGC ATTATCAGCT GTTGAACCTG 120  
 ATGTATACGT TGCGCAACCC ATAACATCT GTGTTACAAT GCACCAAACG CACCTCCACC 180  
 30 AGCTACATTA GATGGGCAGC TTCGCCCTTGC AGCTGATTGG TTTAGATGAT TGTGATACGA 240  
 TCCAATTTGA AGCCAAATnG TACTTAAGCA CAATCCTACT GCGGACCGTT TAACCCTGTT 300  
 TCACCTATAC ACTGnTGAAA GGCAAACCGT ACCACTCACC ATTTCCATGC CTTCCATATT 360  
 35 TGGTTACCAA ATTTACTTTT CCCnGAAAAA TGAAACTCTT 400

## (2) INFORMATION FOR SEQ ID NO: 3071:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3071:

TGGCCATTTG TCATTGCATT TTTACCGTGG GTGTTGATTA TTATTCCTTA CTTACTATTT 60  
 50 AAATCGGATA CACTAAATAT TATTCATACG GGTGATAATA TTGCACGAGG TCTAGGTGTA 120  
 AGGTTAAnCA GAGAACGTTT AATATTATTC TTTATCGCAG TGATGTTATC ATCTGCTGCT 180  
 GTAGCATAGC AGGTTCAATT TCGTTTATCG GATTAATGGG TCCGCATATT GCCAnACGTA 240

## (2) INFORMATION FOR SEQ ID NO: 3072:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3072:

GACTCCCTGC AGGTCGACGT CTAGAGGATC CCCCCACAGC AATTCACCTTA TACATGTAAC 60  
 AGTGTGAAAT AATAACGTCA CAACGGCATA ATACACATTG CAACGTCCCA ACAACATATC 120  
 ATAGAATCGT AACGGCATGA CATCAACACC AAACCTGGGC TATAACACCA TAACAGCGCA 180  
 ACGCCACATC ATAGGCACTA CATCAAGTCG CATCGTAGCA CCAGCACATC AAAGTAACAT 240  
 GGGCATCAAC ATCAAACCGG TCTATAACAC CATAACACCG GCAATGCCAC ATTCATAGGC 300  
 ACTACATCAA GTCGGCATC 319

## (2) INFORMATION FOR SEQ ID NO: 3073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3073:

ATATACGCTT ATCAGCTGGA GCTCAATAGA TGGAGGATGA TTATGGGGCT ACCGGTTCTG 60  
 TCTATAGCAC TGGTCTATCA GCTATGTGGA TTACAATCGG TTTAACATTA GGTGCTTATA 120  
 TAAATTACTT TGTGTTGCT CCTAGACTTC GTGTTTATAC CGAATTAGCT GGAGATGCAA 180  
 TTACATTACC AGATTCTTT AAAAATCGTT TAAACGATAA AAATAATGTG TTAAAGATTA 240  
 TTTCTGGATT GATTATCGTA GTATTCTTTA CATTATATAC nn 282

## (2) INFORMATION FOR SEQ ID NO: 3074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3074:

AATCGAnAAA TCATGGATGT ACTTGAATCA AATGCAAACA GCGAAGTGTh TTGAATTGCA 120  
 TGGTAGCGTT ATAGACGAGC CAGTAGAAAT TCAATCAATT AAAGTATATG TTCCTAACGA 180  
 5 TGATGAAGGT CGTACGACAA CTGTAATTGG TAATGCTTTC CCTGACTCAG AAGTTAAATG 240  
 CATTACACCA GCAGATATCA TkGCTTCAAT GAGTTACTTC TTAACTTAT TAAGCGGtAT 300  
 TGGGtATACA GATGATATTG GACCATTaGG TAACCGTCGT TTACGTTcTG tAGGkGGaAT 360  
 10 TACTACmAAA CCaATTCCGT ATCgGTTTAT CCAAGA 396

## (2) INFORMATION FOR SEQ ID NO: 3075:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3075:

ACCTACATTT GCAGTTGTCG GTGTATAACC GGCTGGTGTGTT GAAAACTCTA CACTATAAGT 60  
 25 TCCATTGCTT AAACCAGTGA ACTGATATTT ACCATTTTCA TCTGTTGTCG TACGATCTAA 120  
 TTCTTTACCG TTAATATCTT TAAGAATGAC ATAAACACCT TTAATCCCTT TTTCATTGGC 180  
 30 ATCTTGTTTA CCATCTTTAT TTGTATCTCC CATACATAGT CACCTAGATT ATATTChTTT 240  
 GGGCGCCATA GCAGTTGATG AGCATTCACA TTGAAAAACT ATTGACCACT ATATTAGTTT 300  
 GCAGTGCTAA GnATAACATT TCCATACGTG ACATACTGAT AGACTGTGAG TGATGTATGC 360  
 35 GCTGnTGCTC ATAACG 376

## (2) INFORMATION FOR SEQ ID NO: 3076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3076:

TTACATCACC AATTAGACGT TATCCTGATT TAACAGTTCA TCGTTTAATC CGTAAGTATT 60  
 50 TAATTGAGAA ATCAATGGAT AACAAAGAAG TGAAGCGTTG GGAAGACAAA TTGCCTGAGT 120  
 TAGCTGAACA TACTTCTAAA CGTGAACGTC GTGCTATTGA GGCAGAACGT GATACTGATG 180  
 AATTGAAAAA AGCAGAATAT ATGATTCAAC ATATTGGTGA TGAATTTGAA GGTAATGTCA 240

AAnGChGnGA TATACGTTTG AGGCGCAATG C

331

## (2) INFORMATION FOR SEQ ID NO: 3077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3077:

15	AATCATATGC ATCGATTTCC AGCAACAGCA ACCATTCATC CTATGTCCCA TTAGCAAATT	60
	TTTTGGATGA AACATGAATG GCAAGATGTA TTTCAACGTA CTGCTAATTT GCAGATATTA	120
	AAACATACnT TTCTATCATT ATTGATACAT ATATCATGAT TATTTCATGGC TTCCGCAACA	180
20	GGATGTTTAT TTAGAAACAT TAGATTGGGA TGTTGAGGCA TAGAACTGCT GGGTATTTTC	240
	AAGGAAATGT TGCCGGAATT ATTCCAACAA CTATTGATGT AAGTATGAAA GAACGTATGC	300
25	AACATAATGG GCTAATAAAG TACACCGTnT GTTAATGGTG CnATG	345

## (2) INFORMATION FOR SEQ ID NO: 3078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3078:

35	GATTATCAAG CGATTGATCA AGTATCATCA TTGTTGAAAG AAAAAATATGG CATTGCACAT	60
	TCAACGTTGC AAATTGAAAA CTTGCAATTG AATCCATTAG ATGAGCCATA CTTGACAAA	120
40	TTAACATAAA TAAACATTG TAGCGCCTAA AACATTAAATC TATGTCATAG GCGCACGTTT	180
	CGTTTTATAC TTATGTTGCA TCATTTAAAT GATTTTCGTC AATTTCTTTG ATGCTATCTA	240
45	CATCTAACAC GAGGTTAACT TGC GTTGATT TTGATAAAGT GATCATAGCT TTTAGTACTT	300
	GAGGATTTTT ATTGTTGCTG TTACGAATGT GGTTCATGTTT AATGCGGGAC AGTAATTTAA	360
50	GTTGTTTTTT TACAATTGAG AGTGTGATAT TTCGATTCCG	400

## (2) INFORMATION FOR SEQ ID NO: 3079:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3079:

5 AAACGTTTAA TATACACTTT TACACGTGCG CTTCAATTGAA GCGAATTGCC ATAACCTTCA 60  
 CATTATATAT AGTTCTTTCC ATATAAATGT CCAAATTTTT AGAACAACGC AATArATAAC 120  
 CATCCACCTA ACTTATCAAA AATTTAAGTG GATGGTTTTT CATTTTCATT TATATTTATA 180  
 10 TTAGTGTTAA TCCAATCATA GATTTATCTA TATGCACTGC TCTATACaTT TCCTCaTTTA 240  
 ATTTGcYTTA CTTTCATTTA TATCATTATC AGAACACTTG GCGTGTCATC GntATTATTT 300  
 CGCATCTTTG AnACGTTTA 319

## (2) INFORMATION FOR SEQ ID NO: 3080:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3080:

25 TCAAATGCAT CTAGGnCACa TTATTCTATT TGGGCATTCT TAGTGCTGTT CTTATTTGCG 60  
 GCTTTAACGT CATCTATTTT TTTATTAGAA TTAAATGTTT CTAACITCAC GAAGAATGAC 120  
 30 AATACAAAAC GTAAAAAAGT CGCAGTGATC GGTAGTATTT TAGTATTTAT CATTAGTATT 180  
 CCAGCAACCT TATCnTTTGG TATCCTAAAA GATGTAAGAT CGGTGCGGGA ACGATTTTTG 240  
 ATAATAAGGA TTCCACCGTT CGAATGTAAT GAAGCCATAA GCGGG 285

## (2) INFORMATION FOR SEQ ID NO: 3081:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3081:

45 ATCATAGCGT TTCTCCTAAA AATTACGATT AATCAAAGTA TGCCATTATT TAACTTTAGT 60  
 TTCTTCAGAA TTATTTGCCC CATTATCATG TTTTCTTCTT TTATTAACAG CATTTTTATC 120  
 50 ATTTTAAACA AGATACAATT TACCAATTAA TGGGCGGTGT GCGTGCTGGT ATGGGTTATA 180  
 CTGGTTCACA CGATTTAAGA GAATTACGCG AAGAAGCACA ATTTACACGT ATGGGTCCTG 240

CATTCTAATT AAGATAAAGG AGAACGACAA ATATGGGAAA TGGCAAAGGA CCAAGAGTTA 360  
 ATCCTTGTCT TAGGACTTTG GTAGGCCATT ACACCCATTA 400

(2) INFORMATION FOR SEQ ID NO: 3082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3082:

TGAATTTGCT CCAAATAAAA ATACAATTGC CATTAAAATC ACCAGATATT ACAAGTGGCA 60  
 ACATGTTAGA AACACCGTTC ATTAAGTGTT TATAGAATGC TTTACCTGGG CTTATTTCTT 120  
 GACTGTCATT TGAGTTACCT GGCAACAAAA GGTTCACGAC TTGTATCTAA TGAATACCAT 180  
 CTGCTACTGG TnCTTCTACG ACATTTTTTAC CATCGAnGCG GTCCGTCTCA ACATGTACAT 240  
 CAGCAGCA 248

(2) INFORMATION FOR SEQ ID NO: 3083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3083:

TACTAAAGGT TTAAATCAAA AATGGCTAGG TATCGTATTT GCGATTTTAA TTACAATTAC 60  
 ATTTGCATTT GTATTTAACA CAGTGCAATC TAATACAATT GCGGAGTCGT TAAATACGCA 120  
 ATATAATATT AGTCCAGTAA TCACAGGTAT TATTTTAGCA ATCGTAACAG CTATTATTAT 180  
 ATTTGGTGGT GTACGTAGTA TTGCTACGTA TCCTCGTTAA TGTACCGATA TGGCTATCAT 240  
 TACATGGTAT GGTTTAGTAA TAATGCTATT AATTTAGACC AATTGTCCnA TGATAGGACG 300  
 ATATAAAAGG CATTGGnACG ACAAGnACTG GTGCGCTGAG GGCTCGGTCT CCAGGACAAC 360  
 GGGGTATC 368

(2) INFORMATION FOR SEQ ID NO: 3084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3084:

5 TTGGACTTTA TAAAGTTACT AAGTTGTAGA TTATCCTGGT AAAGAAGATA TTGCGGTTGT 60  
 ACAAGTTGAA GAAAAATCAA CACAACCAA AGGTAGAAAA TTCAAAGATT TCACTAGTAA 120  
 ATTTAATATA GCATCAGAAG CTAAAGAAAA TGAACCTATA TCAGTCATTG GTTATCCAAA 180  
 10 TCCTAATGGA ATAACTACAA ATGTATGAAT CAACTGGTAA AGTATTATCA GTGAATGGGA 240  
 TATAGTGnAT CGGATn 256

## (2) INFORMATION FOR SEQ ID NO: 3085:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3085:

25 ATATGCATAT GCTTCTTTAG GTGAACGAAT ATCTGGTTCA GATACGATTT CAATTAGCGG 60  
 TGTACCTTGA CGGTTCAAGT CAACTAATGA ATACTCCACC TTTATGTGTT GACTTACCAG 120  
 CATCTTCTTC CATGTGAAGA CGAGTAATAC CGATTGnTT TGTTCACCG TCGACTTCGA 180  
 30 TATCGATATA TCCCATTTCA CCAATTGGGT TGATCAATTG AGAATTTGAT AGCTTTGGGA 240  
 TATCGGGATA GAATAGTCTA CGGTCAACTA GATCnGGTGC GAnTCCATAT TTAGTGCCAT 300  
 GCAGCACGCA T 311

## (2) INFORMATION FOR SEQ ID NO: 3086:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 271 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3086:

45 ATGTAAATGA TCATCCTTCA TAATAACAAC GATTACTGAT CTTGATCATG ATTTTGAACA 60  
 ATAACAACTG CTTTATTAAT ACCTTGTATA CGCTCGAGnC ATGCCAACCT CTGACAACTC 120  
 50 AATCCTAAAC CCTCGAATCT TAACTTGTTT GTCCTTTCGA TATAAATAAT CTATGTTGCC 180  
 ATCGGGTAAC AAACGAACGA TATCACCCT TCCTATACAT CAGCTGATTT ATATTTGAAT 240

55

## (2) INFORMATION FOR SEQ ID NO: 3087:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3087:

GTAAAGATTT CAATTCATCA TCTTTAAATA AACTTAATGG TAATTnGTTA TACCnAATAA 60  
 AGCCTTCTGG ACACTTCCTT TAGACCGACG ACCGTCTTAG CTAATGTCGA TTTCCCTGAC 120  
 CCTGATTCAC CGACAATGCC TAATGTTTCG CCTTTTCTAA TAGCCAAGTT AATATCATAA 180  
 CTGCTCGGTA TGGGCTGCCC CTCGGTGATG TGTAATCCAC GCTCCACGCG ATCGATTTTA 240  
 ATAAAATATC ATGGTT 256

## (2) INFORMATION FOR SEQ ID NO: 3088:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3088:

AAGGTTATTT GAATGATCAA GGTATCCACA AAAGAGGTGC TGAAATAGAT CGACTCGTTA 60  
 AAGGATGTAC AGGTGTTAAA CGTACAAC TGACAGCATCC AGGGGGTATT ATTGTAGTAC 120  
 CTGATTACAT GGATATTTAT GATTTTACGC CGATACAATA TCCTGCCGAT GATCAAAATT 180  
 CAGCATGGAT GACGACACAT TTGATTTCCC TTCCTnTCAT GATATGTATT AAAACCTGAT 240  
 AAACnTGGAC ACGTGATCCC ACCATGATCG ATGCCTCCAG ATTATCAGGA ATGATCCAAA 300  
 ACCATACCTG AGATGTAAGA GTATCAGTAT TAGACnC 337

## (2) INFORMATION FOR SEQ ID NO: 3089:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3089:

AAACATTACT TTACGCTATC AATGGTGGTA AAGATGAAAA TCTGGTGCAC AAGTTGGTCC 120  
 AAACCTTCGAA GGTATTAACA GCGAAGTATT AGAATATGCC GAnATTCAAG AATTTGATCA 180  
 5 AATGATGGAT TGGCCTAGCA GGTGTTTACA TTAACCTCATT AAATGTATnA CTACATGCAC 240  
 GATAATACAG CTATGACGAT TGAATGGATT ACATGTACAG AATTGTCCGn CCATGGCACA 300  
 GGA 303

10 (2) INFORMATION FOR SEQ ID NO: 3090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3090:

CTTTCGTTAA AGGGGCATAT TCATATAATG GATGGTCATT AATAATAATT CCTGCCGCAT 60  
 GTGTAGATGT ATGTCTTGGT AAACCTTCTA ACTTTTTTACA AATACTGAAC CAGCGTTCAT 120  
 25 GTCGATGGTT TCGATGTACA AACTCTTTAA AATCGTCAAT TTGATATGCT TCATCAAGTG 180  
 TAATTCCTAA TKTATGTGGG ATTAAACTTG GAAATTTTCAT TtAATGTAAC TTCATCAAAC 240  
 CCCATAATTC TTCCAACATC TCTAGCAACT GCTCTTGCAA GCAGATGACC GAAAGTCACA 300  
 30 ATTCCAGATA CATGTAGCTC GCCATATTTT TCTTGACGT ACTGAATGGA CCCTTTCTCG 360  
 GnGTGTATCT GCAAGGTCAA TTTTCATnT CAGGCATGGT 400

35 (2) INFORMATION FOR SEQ ID NO: 3091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3091:

45 TTGTTTTTTC ACGTTCAATn ATTATCTTCA ACTTGTGACT ACAGATTTTA AAATGGAATT 60  
 TACAAGTATC TTCTTCAATA TTTTGCAATCA TGATATCAAA TAATTCATGA CCTTCATTTT 120  
 GATAGTCACG TAATGGATTT TGTGTGTCAT AAGAACGTAA GTGAATACCT TGACGTAATT 180  
 50 GGATCCATGT GTCGATATGG ATCAGTCCAA TGGCTATCAA TAGAACGAGG TAAAATCATA 240  
 CGCTCAAACC CCATCCATTG GnTCCTCTAA GATACCTTTT GACCTTGGAT AGCnGCTCAA 300

## (2) INFORMATION FOR SEQ ID NO: 3092:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3092:

CGACACCTCA ATAATCATAT CGTAATGTTT AACTTTTCCT GATTTAAATG TAATTTTCATT 60  
 TCCATTGATA GCATTAATTT CCTCATTTAA ACGGTATGGA ATCTCCCGCT TATCTAATTC 120  
 ATCAAGTATA GGTGATTCA GTCGGCATCC ATAATTTATT TATCTTATCA GATCGATGAA 180  
 TAAAGTAGGG TGTAACCAC GTTCCATAAA GATTTCAGG AACTCCAATG GAACATAACC 240  
 TGCACCTACC ACCAATACTT TATCCACTTG GATTGGCTTG GAGGAATGGT CGGATAGGCA 300  
 TCCAGGGCCT CCAAAATTCC nAGGGGAAAn GGTAATATCC ACCTTCCAAG GCCAAGGGCC 360  
 AATTGGCACC TGGCCACCCA GGGnCTTAA AAGGGGTAA 400

## (2) INFORMATION FOR SEQ ID NO: 3093:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3093:

TTATACCCGn CAAATTCATA AATATAGTnC CTTTCAATA GATTGATATG TATGTCTAAA 60  
 TGTATCGATT AACTTTGCTA ATGCTGCTTC ATCTAATGGT CGGTCTGCTA ATTTTAAAAA 120  
 TGTATTCTTC AATAGGTATT CCCATATAAT GCGTTATTC TTAGATGAT GGTTCGGTTA 180  
 AGCCACATGC TTAAATGCA CTTTGTGTTG CTACTTCACC ACATTTTTTC GTGTCTGCCA 240  
 ACGTACCATC AA 252

## (2) INFORMATION FOR SEQ ID NO: 3094:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

AATCTATTAA TAATGAAGAA AAAATTGTAC TAGCACGTAG ACGGTTAATA AAGTTCGATA 60  
 AAGATATCAG TATTCCATAT ATTCTAAAGC AAGCATATTC TAAAGAAAAA AACAGTTATA 120  
 5 TATTCTTGTT AGAATCACAA GATTCTATAT TCTTTTCACA AACACCTGnn CAATTAATAA 180  
 AGGTCAATAA TAAAATCTAT CGACTAAAGC TGTGCAGGTC AATTAAACGG TCACAAGTGA 240  
 GGCCGAGGTA CAAAAAATGT TGAGCATTTT AAAGTATAAA CTTATCGACA CGnTTGTGTG 300  
 10 CAGTTTTTCAT GTTT 314

## (2) INFORMATION FOR SEQ ID NO: 3095:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3095:

GGTGAGGCGG CATTGAGAAA AAATGCTGAA GTAATCGAAG CTGTATCGCA GTCTTGTTTG 60  
 25 ACAACAGGAT TTTGTTTATG GTGCCAATTA GCTTTTTTCAA CGTATTTAGA AAATGCCACG 120  
 CAGCCACATT TAAATAATGA CTTACAACAG CAATTGTTAT CTGGAGAAAT ATTAGGTGCT 180  
 ACCGGATTGT CTAATCCCGA TGAAGTCATT TAATGGATTT AGAAnAAGTT GGACCCTTTG 240  
 30 AAACACCACC TTAATGTTGG ATGGGACCAA TTGGGTGGTC CAGTGGGAnC GTAATGCCCA 300  
 GCTGTAAAGT nATAATCCAA GGAAAGACCC AT 332

## (2) INFORMATION FOR SEQ ID NO: 3096:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3096:

TTTATGCATA CGCGCACTCA TCACACTACC GACAACAACA TCATCTTTTC GAGCATATCT 60  
 ACTTAACAAC GTCATGACCA CACTCATAAA GAACATAAAA TCAGTAATTT GATGCTTTTC 120  
 TACATACTTT TGAAGTAGCT GTCTCATTTG TTGATTCATG TAAATGACAT CATGCTCCAT 180  
 50 TTGTCGGTTT AATAATTGGT CTAACATAnT CTGTCGGGTA AGCCTAAAAAT AGGGTACTTC 240  
 ATCCTTGAAT TGAGGATACC CATATTGGTC CTAAGGTTTCG GTCCATATCC ACGGATGGCG 300

ATTTAAGGTT GGATAAAGGT GCCGTTAAGG ATCCAATTCC

400

## (2) INFORMATION FOR SEQ ID NO: 3097:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3097:

ACTCTGGTCC TTCTGCATAA CTGCCGTAAA TAATTCACCT TCATCACACG CTGTACCTAC 60  
 CAATAATCCC nCACGATATA CGTGGAATTC GAGGTGTACG GTAGAAATAC TTCACCAATG 120  
 ATGCACTTAC AATTTTAAAT AGATTTTAA GACCTTGTG GTTTTGTACA ATTAATGTGA 180  
 CATGACTAGG TCTTGCACGT TTATATGCAT CTTCACTACT GAGTTTTTTG GTTGATTTnC 240  
 GTTATGATTT AATACGGCTA ATTCT 265

## (2) INFORMATION FOR SEQ ID NO: 3098:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3098:

CTAATGTATC AGTTTGGCAT GAATTCCTTT GCATCTTTCA ATAATTGTTG TGATCTTTTT 60  
 TAGTCACATC ATCAATTTTC TTATCTTCGT ATAATGCTTT TTCAATCTTA TGATATCCTG 120  
 ACCATTCTTT TTCCTTTTTC TCTTCTTTCA TATCTGCAAG CGGGCATCCA ATTTTAGGAT 180  
 CCTAAATCTC CCAAATGCTT CTGAACTGGT CAGAGCGTCA TAATACATAC GACTTTTGGG 240  
 TATACGCTTT TnCTTGCGCA TACATTATTT CAATCGTTTA CAAATTTTTC TGACCTTTTA 300  
 AAATCATTTnA CTGTCAnCAG A 321

## (2) INFORMATION FOR SEQ ID NO: 3099:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



ATCCGCAATC TGAGAAACAT CATCTTCGAG TTGTTGGAGG GTTCCAATTT TCAAGTCATA 60  
 AATCAGATGA TGAATGGCGA GAGTTTGGAC TAAATCATTT TGTATTACCT GAAGTTTTAA 120  
 5 TTTCAACTGA TAATAATGGG ACATTTTTAA CTTATACAGT TAAAAGGGAA AGTTTTACTG 180  
 TTGAGGCATT GAACGATTTA ATGGATTGTT CAACAATATA TCGGACATAG AGTGGACGAC 240  
 CAATGGGGGA ATACCAGAAT GAGATATTAT AAAACA 276

(2) INFORMATION FOR SEQ ID NO: 3100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3100:

GTCATTTGAT GACAATGGTA TTAGACCAAG TACCAACCGT TCTGTGCCAC nTAAAACGTT 60  
 GTTAATAACT TGCCGGGCTT CACACTAATC AATGGTGGCA AAGTAGGGGT GTTTAGTCAT 120  
 25 GCAAnGTTAA GAACGAGCAT GTTTGATTCA GGAGATAATA AGAACTATCA AGCACAAGGA 180  
 AATGTAATTG CATTAGGTCG TATACATGGA ACTGATACGA ATGACCATGG CGATTTT 237

(2) INFORMATION FOR SEQ ID NO: 3101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3101:

nCGATATAAC AAGGTTGTTA GACTTAAAGG TGGCGATCCA GCGATATTTG GTCGTGTGCA 60  
 AGAAGAAGTC GACATACTAA ATGAACATCA TATTGCGTTT GAAATTGTAC CAGGGGTGAC 120  
 ATCAGCGAGC GCnAGTTTGG CTACTATGCA GACAGGTTTG ACAATGCGTA CAGTTGCTAA 180  
 45 AAGTGTGGAC ATTTTCTACA GGTCACTTTT AAAGATTCAG AAGAAAATGA AGTGGGATGG 240  
 TCCATTCCTT AAGT 254

(2) INFORMATION FOR SEQ ID NO: 3102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3102:

CAATCACTCA TGTAATAATT GATACCTAAG AAGTCGTTTA AATCTTTGGC TGCATCTAAA 60  
 5 ATGGCATAAT CTTCAThTGT AATGTTTAAAT TTACCGCCAn TAACAGATAA GATATGTTGC 120  
 ACACCTTCCA TCGTTTCACG AGTAATACTT ACCTAAATAT GTTGCATCTA AGATGAATTT 180  
 10 ATTATGGATG GATATCTTCT AAATTCTGCT GCACGGGACA TCTTCAGGAT TTGGATGGTT 240

## (2) INFORMATION FOR SEQ ID NO: 3103:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3103:

GTTGTAAACT TCAATTGTTC AAATAAATAA CACATATCAT TGGAGGTGAA TTGATATGCC 60  
 AGATTCAATC ACAATTATAG ATGAAAACAA AGTGGTTGAT GTTGTATTAA TTGCAGGTAG 120  
 25 AATTTTACTT GAATCAGGTG CTGAnACATA TCGAGTTGAA GATACAATGA ACCGTATCGC 180  
 ACATAGTTAT GGTCTTCATA ATACATATAG TTTTGTCACT TCAACTGCAA TTATTTTTTC 240  
 ATTAAACGAT CGAACAAGTA CAAGATTAAT TCGTTACAAG AGCGTACAAC AGATTTAGGG 300  
 30 AAnGTGCGAA TAAGCGGGGn AATTCTTC 328

## (2) INFORMATION FOR SEQ ID NO: 3104:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3104:

TTTTGCTTTG TGCGCTAATA ATCTAATGTT CGTGGAACCG nAACCAGAGA TATTACAAAT 60  
 45 ACATCATCGA CTAATCGCAG GTGTCGTTGA TTCTCCAACA ACATGTGCCT GTTTGCCGAG 120  
 CTGATTTAAG GCGGCATTGC AAACTATTC GCCACGAATC CTGAACGTCC TTTGCCAGCT 180  
 ACAAATATAT GTTCAGCATG TAGTATTTTG GATGCAAAGT TGAAAACTCA TCCGCTTCAA 240  
 50 CATGTGACAA AGTCACTTTA ATCnA 265

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3105:

ACTAGTAGAG TATCTAATGG TGATTTAATC ATTATTACTG CTGGTGTACC AACTGGTGAA 60  
 ACTGGAACTA CTAATATGAT GAAAATCCAC CTAnTTGGTG ACGAAATTGC TAATGGTCAA 120  
 nGTATTGGAC GTGGATCAGT TGTTGGTACT ACATTATTGC TGAAACTGTT AAAGATTTAG 180  
 AAGGTAAAGA TTTATCTGAC AAATTGATCG TTAATAACTC AATCGATGAA ACGTTTGTGA 240  
 CCT 243

## (2) INFORMATION FOR SEQ ID NO: 3106:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3106:

CTATTGCGTT TGGGTAAATC TAAAGCAGGC GTAnATTATC AAAGTTTGGG ATATGCAACC 60  
 AGCACACTTA TTCTTTATGA TTGCAGCGCC AGAAGTGnG CCCAAACACA TCTAGATGCT 120  
 TTAATAAGTT GTCTGGTATT TTAATGGATG AAAATGTACG TGAGAAATTA TTACATGCTT 180  
 CATCACCTGG AAGAAGTACT AGCGATCATA GATGAGGCTG GATGATGAAG TGGA 234

## (2) INFORMATION FOR SEQ ID NO: 3107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3107:

TTTTGAAGCG GCATAATCAT GAAGAATAGG ACTAGGATTA TAACCTTGTA CAGATGATGT 60  
 CGTTGTAATT GACGCACCCG GTTTTAAATA TTCCAATGAC TTTTGAACGT GTCCAAAATA 120  
 GCGGnTAGAn ATTCGTTTCA AATGTTTCTG TAAATGCCTC AGTTGTAAAT CCATGAATAT 180

## (2) INFORMATION FOR SEQ ID NO: 3108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3108:

CTTTAAGTTA CGTTCGGCTT TGATTAAAGT AAAACGTGGT ACTGTTTCCT ATGACAAGAG 60  
 TCTAATTGGA TACAATGTAA ACAAATGGT GnATTTGTAT TATAGATAAT AAACATTTCGn 120  
 TATACATTCA ACATATCGAT GACCACTTGG ATTAAGCAAC GTAATATCAT TCGTACTGCT 180  
 CAAGAAATGA CAAACGAAAT ACGAGAAAAT TTTGAGTCAT ACACGTCATT TAGAATGAAT 240  
 AGTATTATGC AAGTACT 257

## (2) INFORMATION FOR SEQ ID NO: 3109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3109:

CTTAAAGCCA AGTCGATCTG CTAATTTTGC AAGTGTCCT GAATCTTGCA ATGCCTTTTG 60  
 TGCATCCTTA CCTTCATCTA TTAAGGCATA GTCTAATACG CTTAATTTAA CCAATCCGTC 120  
 ATCTCCAAAC TTATCCTGTC ATGTCAAACC GACATAACAT TTGTAGCGTT CTTAATACCA 180  
 TTCCCTCTGC ATATACCCAC GTATATGATA ACGTnTTTCA nTTAACT 227

## (2) INFORMATION FOR SEQ ID NO: 3110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3110:

TTTCTTCATC GTTTGTGAGA AAGAGGTATT TTTAATTGGG AAAnCAGGTA AAAAGGATGG 60  
 AAGTACATAA AAAGAGCAAT GCTTGGGCAT TATTCCnCTT GTTATTATTT GTGGCGTTGT 120

GATAACGTAA TTGTGCGTTA TTAATGAATC GAAAAGAATC ATTGCTAAAA AGTGAGTCTC 240  
 CGAAAGGCGG CCTTCAACTG TTAAGAGTGA TTTATTGCAG GCTTCAATCG CGAAATGGTG 300  
 5 CnAAGCGCGT ATTAGCACTA GCCGAA 326

(2) INFORMATION FOR SEQ ID NO: 3111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3111:

CTACGGCGCC TTGCATCTTT CCCAACAATT AACCCCAACT CTATTAGCAC AGATTTATCA 60  
 20 ATTGATTCAT AAGCTTCATC AAAGGGTGAA CTAACATGCA TTAACGCTTC TTAAATATCA 120  
 ATTAAGTCGG CATGTTCAAC ACCAATTTTC CCTTTTTTAT TTTTAGCTTT TTCTCTATCA 180  
 ATATACGCAT GTTTAACACC TTTGACATGT TCAGTAAATT GTGACTTCCT nAATTTTTTA 240  
 25 TCCTCCCTTG GTGnnGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGGG 300

(2) INFORMATION FOR SEQ ID NO: 3112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3112:

TTATTGTAA CACAAGnTT CGAACAAGGT TGGTTTAGTA CATTTTCAAT CATTTGTCTG 60  
 40 AGCATTTTTA TCATCACTAC GTTGATATTC ATCATCATCG AACGTCGACA TGAAGTACCT 120  
 TTTATTGATT TCTCAGTATT ACGCAACCGT CCGTTCATTG GTGCATTTTT AAATAACTTT 180  
 GTTTTAAATA GCGGTCTAGC GTAACAGGGT CTTTCATATA TGCTCAACAC ACCTGGTTTA 240  
 45 TCGCGCGCAA TCGGACTGTT ACATGCCAAT GCCATGGGCG TTCGAGATCG TTAGTGAAAG 300  
 CACATAGTTC GGGCAATGAG CCACATGGTC GTGTCCGTCA CGCACACATA TAGCAGCT 358

(2) INFORMATION FOR SEQ ID NO: 3113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3113:

	TCGGTCTTGA AAACCGACAG GGGACTTAAC GGCTCGCGGG GGTTCGAATC CCTCTTCCTC	60
5	CGCCATCAAT ATTTATATTA AATTCTATAT ATAATGAAGG TAAGTGCTCA AATTTTGAGT	120
	ATTTACCTTT TTTATTTGTC TTTGAATGGC TCGTAATTTT TGATAATAGA AATGATAAGG	180
	CATTGAGATT GGAAGGGCAT TTGGCTTGTG CAAnATACAT AGCnAAATGT CGTTGTTGTT	240
10	TTGTGATAGA T	251

## (2) INFORMATION FOR SEQ ID NO: 3114:

## (i) SEQUENCE CHARACTERISTICS:

15	(A) LENGTH: 6591 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3114:

	TTTAAGTGAA TTnCTTTGGG TTACAGAAwT TTCAACAAC TTAAGCAGC TATAATGATG	60
25	ATTTTCAGCT TGTACAAAGG AGAAAAAAG AAGACAACCA AGCCCAATAA TGGACTGGCC	120
	GCCTAATAAT AAAAActCTA AAAGTTGTAT TTTAAAAATA GTTCTTTAAA TTATATACCC	180
	ACCACATTTG GTGGAGaACC GTTAAACAAT GCATAGTTGC TTAACCTCCA ATATTGAACT	240
30	CATCATTACA ATTTGACATA GAGTCTATTA AAGCGTGTGC CATTTGAGTC CACTTTTATT	300
	TGTATTGTAT AGAGAGAAAT AAAAAGAAAC CTGTGTTTAC AAGGTTTCTA ATACGTTATG	360
	TTATGTAAAT AACAGTTAAT TATACCGGTG GTCGGGGTCG AACCGACACT CCACAAGTGG	420
35	AACGgGATTT TGAGTCCCGC GCGTCTGCCA ATTCCGCCAC ACCGGCTTAA TGGTAAACAA	480
	AAAACTTCCC TTTGGAAGCA ATTATGGAGC GGAAGATAGG ATTTACACCT ATACCTCGTT	540
40	CCGGGAAGGA ACGTGtTCTA AAAGTTGAAC TACTCCCGCA AATATTAAAT TATGGAGCGG	600
	AAGATAGGAT TTACACCTAT ACCTCATTC AGGAAGGAAT GTATTCTAAG AGTTGAAATA	660
	CTCCCGCATT ATTATTAAAT TATGGAGCGG AAGATAGGAT TTGCACCTAT ACCTCGTTCC	720
45	GGGAAGGAAC GTGTTCTAAA AGTTGAACTA CTCCCGCATA AACCTGGAGG CGGCAACCGG	780
	ATTTGAACCG GTGATAAAGG TTTTGCAGAC CTCTGCCTTA CCACTTGGCT ATGCCGCCAA	840
	TAActGGGCT AGCTGGATTG GAACCAACGA GTGACGGAGT CAAAGTCCGT TGCCTTACCG	900
50	CTTGGCTATA GCCCATTAAT AATAAGGGCG GCTGAAGGGG ATCGAACCCT CGAATGTCGG	960

	CGAACCCACA	CCAAAGGTTT	TGGAGACCTC	TATTCTACCG	TTGAACTATG	CCCCTATTAA	1080
	AAATAATAAA	TGGAGGGGGG	CAGATTTCGAA	CTGCCGAACC	CGAAgGAGCG	GATTTACAGT	1140
5	CCGCCGCGTT	TAGCCACTTC	GCTACCCCTC	CATAAATGGT	GCCGGCCAGA	GGACTTGAAC	1200
	CCCCAACCTA	CTGATTACAA	GTCAGTTGCT	CTACCAATTG	AGCTAGGCCG	GCTAAGAAAT	1260
10	GGTTCAGGAC	AGAGTCGAAC	TGCCGACACA	TGGAGCTTCA	ATCCATTGCT	CTACCAACTG	1320
	AGCTACTGAA	CCATAATAAA	AATGTAATGA	TGGCGGTCTC	GACGGGAATC	GAACCCGCGA	1380
	TCTCCTGCGT	GACAGGCAGG	CGTGTTAACC	GCTACACTAC	GAGACCTATA	AAATATTGCG	1440
15	GGAGGCGGAT	TTGAACCACC	GACCTTCGGG	TTATGAGCCC	GACGAGCTAC	CGAACTGCTC	1500
	CATCCCGCGA	TAATAAAAAA	TAATGGCGGA	GGAAGAGGGA	TTCGAACCCC	CGCGGCCCGT	1560
	TAAGGCCCTG	TCGGTTTTCA	AGACCGATCC	CTTCAGCCGG	ACTTGGGTAT	TCCTCCATTA	1620
20	TTATAGGTAA	ATCGCTATTA	ATTATAAAAT	TAAATGGCGG	TCTCGACGGG	AATCGAACCC	1680
	GCGATCTCCT	GCGTGACAGG	CAGGCGTGTT	AACCGCTACA	CTACGAGACC	ATTAGTAAAA	1740
	CGGAGGAAGA	GGGATTTCGAA	CCCCCGCGAG	CCGTTAAGCC	CCTGTGCGTT	TTCAAGACCG	1800
25	ATCCCTTCAG	CCGGACTTGG	GTATTCCCTCC	AAAATTATAT	GgAcTGCAG	GACTCGAACC	1860
	TGCGACCGAA	CGGTTATGAG	CCGTTAGCTC	TAACCAACTG	AGCTAAAGGT	CCTAAATATA	1920
30	ATTTTACAAC	TAATAAATAG	TGGCGGTGGA	GGGGATCGAA	CCCCCGACCT	CACGGGTATG	1980
	AACCGTACGC	TCTAGCCAGC	TGAGCTACAC	CGCCTTATAT	AGTTTGTAAG	TAATATGGTG	2040
	GAGACTAGCG	GGATCGAACC	GCTGACCTCC	TGCGTGCAAA	GCAGGCGCTC	TCCCAGCTGA	2100
35	GCTAAGCCCC	CATAATAATT	ACAGTATATC	GGGAAGACAG	GATTTCGAACC	TGCGACCCCT	2160
	TGGTCCCAAA	CCAAGTGCTC	TACCAAGCTG	AGCTACTTCC	CGTATAATTA	ACGCGCCCGA	2220
	TAGGAGTCGA	ACCCATAACC	TCTTGATCCG	TAGTCAAACG	CTCTATCCAA	TTGAGCTACG	2280
40	GGCGCATATG	TTTTTATTGA	AAATGGTGCC	GAGGACCGGA	ATCGAACCGG	TAcGgTGATC	2340
	ACTCACCPCA	GGATTTTAAG	TCCTGTGCGT	CTGCCAGTTC	CGCCACCCCG	GCACTATAAA	2400
	AATGGAGCAG	AAGACGGGAT	TCGAACCCGC	GACCCCAACC	TTGGCAAGGT	TGTATTCTAC	2460
45	CGCTGAACTA	CTTCTGCATA	TGCGGGTGAA	GGGAGTCGAA	CCCCCACgCC	GTAAGGCGCT	2520
	aGATCCTAAG	TCTAGTGCGT	CTGCCAATTC	CGCCACACCC	GCAAATGGTG	AGCCATAGAG	2580
50	GATTTCGAACC	TCTGACCCTC	TGATTAAAAG	TCAGATGCTC	TACCAACTGA	GCTAATGGCT	2640
	CTTCCATGGT	GCCGGCCAGA	GGACTTGAAC	CCCCAACCTA	CTGATTACAA	GTCAGTTGCT	2700
	CTACCAATTG	AGCTAGGCCG	GCAATATGTA	AGAATAAATG	GTGGAGAATG	ACGGGTTCTGA	2760

	AAACTGCCTG	GCAACGTTCT	ACTCTAGCGG	AACGTAAGTT	CGACTACCAT	CGACGCTAAG	2880
	GAGCTTAACT	TCTGTGTTTC	GCATGGGAAC	AGGTGTGACC	TCCTTGCTAT	AGTCACCAGA	2940
5	CATATGAATG	TAATTTATAC	ATTCAAAACT	AGATAGTAAG	TAAAAGtGnA	TTTTgctCGC	3000
	AAAACATTTA	TTTTGATTAA	GTCTTCGATC	GATTAGTATT	CGTCAGCTCC	aCATGTCACC	3060
	ATGCTTCCAC	CTCGAACCTA	TTAACCTCAT	CATCTTTGAG	GGATCTTATA	ACCGAAGTTG	3120
10	GGAAATCTCA	TCTTGAGGGG	GGCTTCATGC	TtnAgGATtT	TCAGCACTTA	TCCCGTCCAC	3180
	ACATAGCTAC	CCAGCTTATG	CnTTGGCACG	ACAAcTGGTA	CACCAGAGGT	ATGTCCATCC	3240
	CGGTCCTCTC	GTACTAAGGA	CAGCTCCTCT	CAAATTTCTC	ACGCCCACGA	CGGATAGGGA	3300
15	cCGAACTTcT	aCGACGTTCT	GAACCCAGnC	sTGTACCGCT	TtaATGGGCG	AACAGCCCAA	3360
	CCCTTGGGAC	CGACTACAGC	CCCAGGATGC	GATGAGCCGA	CATCGAGGTG	CCAAACCTCC	3420
20	CCGTTCGATG	GAACCTTTGG	GGGAGATAAG	CCTGTTATCC	CCGGGGTAGC	TTTTATCCGT	3480
	TGAGCGATGG	CCCTTCCATG	CGGAACCACC	GGATCACTAA	GTCCGTCTTT	CGACCCTGCT	3540
	CGACTTGTAG	GTCTCGCAGT	CAAGCTCCCT	TATGCCTTTA	CACTCTATGA	ATGATTTCCA	3600
25	ACCATTCTGA	GGGAACCTTT	GAGCGCCTCC	GTTACCTTTT	AGGAGGCGAC	CGCCCCAGTC	3660
	AAACTGCCCC	CCTGACACTG	TCTCCCaCCA	CGATAAGTGG	TGCGGGTTAG	AAAGCCAACA	3720
	CAGCTAGGGT	AGTATCCAC	CAGCGCCTCC	ACGTAAGcTA	GCGCTCACGT	TTCAAAGGCT	3780
30	CCTACCTATC	CTGTACAAGC	TGTGCCGAAT	TTCAATATCA	GGCTACAGTA	AAGCTCCACG	3840
	GGGTCTTTCC	GTCCTGTGCG	GGGTAACCTG	CATCTTCACA	GGTACTATGA	TTTCACCGAG	3900
35	TCTCTCGTTG	AGACAGTGCC	CAAATCGTTA	CGCCTTTCGT	GCGGGTCGGA	ACTTACCCGA	3960
	CAAGGAATTT	CGCTACCTTA	GGACCGTTAT	AGTTACGGCC	GCCGTTTACT	GGGGCTTCGA	4020
	TTCGTAGCTT	CGCAGAAncT	ArCcACTCCT	CTTAACCTTC	CAGCACC GGG	CAGGCGTCag	4080
40	cCCtATACAT	CACCTTACGG	TTTAGCAGAG	ACCTGTGTTT	TTGATAAACA	GTCGCTTGGG	4140
	CCTATTCACT	GCGGCTCTTC	TGGGCGTTAA	CCCTAAAGAG	CACCCCTTCT	CCCGAAGTTA	4200
	CGGGGTCATT	TTGCCGAGTT	CCTTAACGAG	AGTTCGCTCG	CTCACCTTAG	AATTCTCATC	4260
45	TTGACTACCT	GTGTCGGTTT	GCGGTACGGG	CACCTATTTT	CTATCTAGAG	GCTTTTCTCG	4320
	GCAGTGTGAA	ATCAACGACT	CGAAGACACA	ATGTCTTCTC	CCCATCACAG	CTCAGCCTTA	4380
	ACGAGTACCG	GATTTGCCTA	ATACTCAGCC	TTACTGCTTA	GACGTGCAAT	CCAATCGCAC	4440
50	GCTTCGCCTA	TCCTACTGCG	TCCCCCATC	GATTAAAACG	ATTATAGGTG	GTACAGGAAT	4500
	ATCAACCTGT	TATCCATCGC	CTACGCCTGT	CGGCCTCAGC	TTAGGACCCG	ACTAACCAG	4560



	TTCGCTACTC	ACACCGGCAT	TCTCACTTCT	AAGCGCTCCA	CATGTCCTTA	CGATCATGCT	4680
	TCAACGCCCT	TAGAACGCTC	TCCTACCATT	GTCCAAAGGA	cAATcCACAG	CTTCGGTAAT	4740
5	ATGTTTAGCC	CCGGTACATT	TTCGGCGCag	TGTCACCTCGA	CTAGTGAGCT	ATTACGCACT	4800
	CTTTAAATGA	TGGCTGCTTC	TAAGCCAACA	TCCTAGTTGT	CTGGGCAACG	CCACATCCTT	4860
	TTCCACTTAA	CATATATTTT	GGGACCTTAG	CTGGTGGTCT	GGGCTGTTTC	CCTTTCGAAC	4920
10	ACGGACCTTA	TCACCCATGT	TCTGACTCCC	AAGTTAAATT	AATTGGCATT	CGGAGTTTGT	4980
	CTGAATTTCG	TAACCCGAGA	GGGGCCCCTC	GTCCAAACAG	TGCTCTACCT	CCAATAATCA	5040
15	TCACTTGAGG	CTAGCCCTAA	AGCTATTTTCG	GAGAGAACCA	GCTATyTCCA	GGTTCGATTG	5100
	GAATTTCTCC	GCTACCCTCA	GTTTCATCCGC	TCACTTTTCA	ACGTAAGTCG	GTTTCGGTCCT	5160
	CCATTCAAGT	TTACCTGAAC	TTCAACCTGA	CCAAGGGTAG	ATCACCTGGT	TTCGGGTCTA	5220
20	CGACCAAATA	CTAAACGCCC	TATTCAGACT	CGCTTTCGCT	ACGGCTCCAC	ATTTACTGCT	5280
	TAACCTTGCA	TCAAATCGTA	ACTCGCCGGT	TCATTCTACA	AAAGGCACGC	CATCACCCAT	5340
	TAACGGGCTC	TGACTACTTG	TAAGCACACG	GTTTCAGGTT	CTATTTCACT	CCCCTTCCGG	5400
25	GGTGCTTTTC	ACCTTTCCTT	CACGGTACTG	GTTCACTATC	GGTCACTAGA	GAGTATTTAG	5460
	CCTTAGGAGA	TGGTCCTCCC	AGATTCCGAC	GGAATTTTAC	GTGCTCCGTC	GTACTIONGGA	5520
	TCCACTCAAG	AGAGACAACA	TTTTCGACTA	CAGGATTATT	ACCTTCTTTG	ATTCATCTTT	5580
30	CCAGATGATT	CGTCTAATGT	CGTCCTTTGT	AACTCCGTAT	AGAGTGTCTT	ACAACCCCAA	5640
	CAAGCAAGCT	TGTTGGTTTG	GGCTCTTCCC	GTTTCGCTCG	CCGCTACTAA	GGAATCGAA	5700
35	TTTTCTTTCT	CTTCCTCCGG	GTACTAAGAT	GTTTCAGTTC	TCCGGGTGTG	CCTTCTGATA	5760
	TGCTATGTAT	TCACATATCG	ATAACATGAC	ATAACTCATG	CTGGGTTTCC	CCATTCGGAA	5820
	ATCTCTGGAT	CAAAGCTTAC	TTACAGCTCC	CCAAAGCATA	TCGTCGTTAG	TAACGTCCTT	5880
40	CATCGGCTTC	TAGTGCCAAG	GCATCCACCG	TGCGCCCTTA	ATAACTTAAT	CTATGTTTCC	5940
	ATCCTACAGG	AAACGCGTTA	TTAATCTTGT	gaGTGTTCTT	TCGAACACTA	GCGATTATTT	6000
	CTTATGAATT	CAAGCTTATT	TAAAACTCTT	TATTCACCTG	GTTTTGCTTG	GTAAAATCTA	6060
45	TATTTTACTT	ACTTATCTAG	TTTTCAATGT	ACAATTTCTT	TTTAGTCAAG	CGCTCGCATA	6120
	AGCAATATCA	CTTTAACCAA	AAAATATTTG	AATGTTAAAT	AAACATTCAA	AACTGAATAC	6180
50	AATATGTCAC	ATTATTCGGC	ATCTTCTGAA	GAAGATGTTT	CGAATATATC	CTTAGAAAGG	6240
	AGGTGATCCA	GCCGCACCTT	CCGATACGGC	TACCTTGTTA	CGACTTCACC	CCAATCATTT	6300
	GTCCACACCTT	CGACGGCTAG	CTCCTAAAAG	GTTACTCCAC	CGGCTTCGGG	TGTTACAAAC	6360
55							

ATCTACGATT ACTAGCGATT CCAGCTTCAT GTAGTCGAGT TGCAGACTAC AATCCGAACT 6480  
 GAGAACAACCT TTATGGGATT TGCTTGACCT CGCgGGTTCG cTkGCCTTTG TAATGTCCAA 6540  
 5 TGTAGCACGT GTGTAGCCAA ATCCATAAGG GGCATTATGA TTTGACGCAT C 6591

(2) INFORMATION FOR SEQ ID NO: 3115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3115:

GGTGCCAAGC AATAAATATG ACTATGCTCA AACTGAATTA ATGGTGGGTG TGTCGCCATC 60  
 20 GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA AGGTAGCATA 120  
 TGTAAATTGTT TGTGTTTACG TATTTCTGGT GTAAGTTCCG TGAAACCAAT GTCTATATTC 180  
 CCATTAATAC GCTATTATAA TGTGTCAGGT CCAATAAGCC CCGGATGACA TGTGTATCCA 240  
 25 TTTGGAAATG GAACCGTTGG GAAAGTGGGA ATAACATGGG GGAACGTCAn TCCCCnCCAA 300  
 GCCCATHGAG GTACCTTTAA TTTTA 325

(2) INFORMATION FOR SEQ ID NO: 3116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3116:

CCGnTTGAGT TCGGTGGCGA CATGATTGAT TTTGTAAGTA AGTATGATGC AACATGGGCT 60  
 GnTTTACCTA CTAAATTTGA GGCGGGTACT CCATTAATTG CTCAAGCATT GGGCTTGTCa 120  
 GAAGCTATTC GCTATTTAGA ACGCATAGGT TTTGATGCAA TTCATAAATA TGAACAAGAA 180  
 45 TTAACGATAT ATGCTTATGA GCAAATGTCT G 211

(2) INFORMATION FOR SEQ ID NO: 3117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3117:

AACGThTTTT GAAATGATTG CGGCGATGTT GGCGACAGTT AAAGTAGGTG GCATCTTATA 60  
 5 TACCTATCGA TATTGATTTT CCGAATAAAC GACAAGGTGC AATTTTGGAG GATGCTAAAG 120  
 TAACTGCAGT CATGTCTTAC GGCCTTGHAA TTGAAACGAC ATTACCAGTC ATTCAATTGG 180  
 10 AAAATGCTAA AGGCTTTGTT GAATCAAAGG 210

## (2) INFORMATION FOR SEQ ID NO: 3118:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3118:

TTAATTGATC CTAGCTTGGT TTGCCTCTGT CACTTTATCA TTGATATTTT GGACAGTTGG 60  
 GTTGCCATTC AACACTTGAT TAATTTCACT TAACTTTTGA CGCGCTGCTT GTAATTTTGG 120  
 25 GGTGTACGCA TTAAACGAAC GGnCGTCATA CCTGTTGTAT CCGTTGGTTG ATTAATGCTT 180  
 GTTCTAAATT GCGTTTCCAA GTTThAAGCG GCGCTTATCT GGTGT 225

## (2) INFORMATION FOR SEQ ID NO: 3119:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3119:

CCAACATGAT GCTAGTTTGA TTAAGTTTCT TCTAAACAGA CTTCAAACGG CATGGTTTAG 60  
 CATATCCTAT TAAGTTTGAA TCGCGTTAAC AGCACATAGG AAATGCTGTT AGGCGATGCA 120  
 GAGTGCGATT AGGCAGCTAC TGGAAAATTA TTGTTTGATT TGCCAGTTAT TATAAACTGT 180  
 45 GTGTGTTGAT GnCGAnCACA ACCCCTCCGA ACACGCTTAA TG 222

## (2) INFORMATION FOR SEQ ID NO: 3120:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3120:

CGGCGATTAT ATTAAAAAGC CAATTACAGA ATGTAGTGGT AATGAAATAT GCCAAGAATG 60  
 5 GCTGTATCAC TTAGGTGTAT CAACTGACAA AATTGAAGAC TTAGCAAAAC ATGCATCTAA 120  
 TACGATTCCCT GTTTATATGC CATATATCAC ATCTTATTTT ATGGACGCGT GCTATCGGCG 180  
 nACAGACCTT TTAGTCGTGC CCGGCATGCA ATCTnCAGGA ACTTAGGCAT TTATTGGTGA 240  
 10 ACTTTG 246

## (2) INFORMATION FOR SEQ ID NO: 3121:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3121:

CAAATACCTT CTCAACnTTG TACTTTTTGC CTAATTGAGC TGCACGAATT GCTGCAACGT 60  
 25 ATCCACCAGG ACCTGCTCCG ATTACTATAG aTCTGTTTCA ATTGGGAAAT CTCCAACCTAC 120  
 CATGTTTTAC CCCTCCATTA ATAATAATTC TGGATTATTT AATAAACGTT TAATGTGATT 180  
 CATTGCATTT TGGCCAGTTG CACCATCAAT TTGTCTGTGG TCAAAGCTTA ATGAkrtGct 240  
 30 AATACTGGTG CTGCAACAAT TTCTCCATCT TTAACGATAG GTTTTTGAGC AATACGGCCA 300  
 ATTCCTAAGA TTGCTACTTC TGGGGTGATT GATAACTGGA GTGAACCATT GTCCACCAGC 360  
 35 TGAACCGATA TTACTGATTG TGCATnnGCA CCTTnCATT 399

## (2) INFORMATION FOR SEQ ID NO: 3122:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3122:

CAGACAAACC TTGAATTATT CTACCTATAA TTAAAAATGC TGGCAAAGGT GTAATGATGA 60  
 TGAGTAATGA ACCTACAACA TTTAATATCA ATCCTACATA AGTAATTTTG ACGCGACCAA 120  
 50 ATTTATCAGC AACATCACCA GCACCTACGT AAACCAACCA GCCAATAAGG CAGATAAGCT 180  
 AACAGCGTAT TATCGTTCCC ACGTCACTAC TATATGTGGA TGTATGGGAC ACAGTTTACC 240

G

301

## (2) INFORMATION FOR SEQ ID NO: 3123:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3123:

GGAGCAAATT TATCATCTGC AACTAGACAC AACATCACTG TTATTAGTAC CGGGTTATAT 60  
 AGTAGCAGTC ATTGTTGGTG CACTAAGTGG TAAAATCGGC GAATATCTGA ATTCAAAACC 120  
 AGCGATTATC ACAGCAATTA TTTAATAGCA CTGAGCTTGA TTTACCTGCA TTGCAGTAGG 180  
 TAATCACATT CAATCTCGTC ATTCTATGAT ATCTTGCACT AGCTTGCTTA ATGATGCACT 240  
 TACTACGAGC ATAAACATGT CTATATGCAG GTGCATGTTA TATTATATAT GCGGACGAGA 300  
 TCGTnGGCCn ACGTTAACTA ATTCnGCATG TCTAGCCTCG AATTATATAG TAGGAGCGTA 360  
 GTACGCCAAC TGCCACGA 378

## (2) INFORMATION FOR SEQ ID NO: 3124:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3124:

TATTGCAAGA AATGAACTGC TGATTTTTTAT AGTTTTTAGTG GTCATAAAAT GCTTGGACCA 60  
 ACAGGTATTG GCGTATTATT TGGTAAACGT GAGTTACTAC AAAAAATGGA ACCGATTGAG 120  
 TTCGGTGGCG ACATGATTGA TTTTGTAAGT AAGTATGATG CAACATGGGn CTGATTTACC 180  
 TACTAAATTT GCAGGTCGGG TTACTIONCAT TGAATTGGCT CCAAGCCAAT TGGGGCTTGG 240  
 CnAGGAAGCC T 251

## (2) INFORMATION FOR SEQ ID NO: 3125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3125:

CGGTTAAGTA ATACAGGATG TTCTCTAATT ACTTCTTCCA ATACGTCCCA AACTTCATCA 60  
 5 TCCATACGTT CGATTTTACT CTTCGCATTT TTAATGTTAG TTGCAATTC AC GTTGAAC T 120  
 AATTCCTTTCA TTACGAATGG TTAAATAGT TCAAGTGCCA TTTCTTTTGG TAAACCACAT 180  
 TGGTACCATT TCCAnGCTTG GACCCnACGG CAATTACCTG AACGGTCCCCG GAA 233

## (2) INFORMATION FOR SEQ ID NO: 3126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3126:

AATAGATTCC CGGGATTCAA AAGCATGGAT GTTGTA CTT GTTGThCTCC ATTGGCAATG 60  
 TACTACCTGA TGTCAAGATG AATTATCCAT CACTTTGTTG ACGTGCTTTA TTTTACAGCA 120  
 25 TCAATTTGAT CCAATCGAAA TACCAGATAA CTTAGACTGT GTCCCAGTAA AATAACGATC 180  
 AATCACATCA TGAGACAAGC CAATCGCTTC AAATATTTGT GCCCCTTGAT AACTTTGCAC 240  
 TGTCGAAATT CCCATCTTAG CCATTACTTT AATGACACCT TCTGACAATA CATCCGTATA 300  
 30 TGTCTTAACA TTATCGACAA CGGTGCCTTG TAACCCCTTCT GTCAATGTCA GTTGTTCAAC 360  
 TGTACGTTGC GCTAGGTATG GCACAATTGa TTCGCGCCAT ATGCGAGTAA ACA 413

## (2) INFORMATION FOR SEQ ID NO: 3127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3127:

GTCGTAAATA CTGAACAAAA ATCACGGCAT ACTGTGCAAA TTTnTGAAGA AGCTCAAAAA 60  
 CTATTACAAG CACATCATGC GATTGTAGAA GGATATATCG AATCAGCTTT AGAGCGTGCG 120  
 50 TAnATCATCT TCTACATACA TAGGTAATTT TATGGCGATT CCTCATGGAG CATCCTGTAA 180  
 AAAGTTTTAC AATCACATGT GCTTATTTT 209

## (2) INFORMATION FOR SEQ ID NO: 3128:

- (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3128:

10 TAAATTAATG GAGTTTGGTA CACGTCGTCG CAAGAAATTG ATGCAGTGGG GCGCTAGAGC 60  
 TGCTTACATC GGGGGCTTTG ATTCTACAAG TAATGTTAGG GCGGGGAAAT TATTTGGTAT 120  
 ACCTGTGTCT GGTACACATG CACATGCATT TGTCCAAACT TATGGAGACC AATATGTTTG 180  
 15 CCTTChAAAA ATATGCTGAA AGnC 204

## (2) INFORMATION FOR SEQ ID NO: 3129:

## (i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3129:

GAAATACCAT TAATATAATA GTCGGTAAAT TAAGAAACGT GGTGCGCGAT TCACAACAGA 60  
 30 AATCTTAACT TATCGAAGTA TCCTGTTTTC TCTGCAACAC CAATACCAAT CATCACTGCT 120  
 AGTACTAAGC CTAATGCGGG AACTCTGAGA AATTTTAAAT CGTATTCTTC TTATCATCGT 180  
 AAATCCATCT GGCTATTATA TTTTAATATA AnGGTTTGAG CTACCGGATG CTAACGnAC 239

35

## (2) INFORMATION FOR SEQ ID NO: 3130:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 259 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3130:

ATCACAATAA ACATTTTAAA ATTCTTGTTA TCATAATCAT TAAAAGGTAT TAACCTTAAT 60  
 AATATATTCT CTnGTCTCAA CCTTAATCGT ATACTTCAGA CGTCTGTTTG TAGACAATAA 120  
 50 AGTCATTACAC GTCTTCATAT GTCATCAnAT GTTTATCATG ATATGATGAT ATATAATCGG 180  
 TATATACTGT AGATATTACA CATAAGAGAG GATATAATAT GAAAAGGTCA TTAAGATGTG 240  
 CTGAGAGCTG TGTATCAGT 259

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## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3131:

TGTGCCTGCC ATTTTGCAAT ATCTTCATCT TCACGTGGTA ATGCACAAAA ATGTTTACCA 60  
 TGTGCATTCA CAACTTCAAA AATATGTTGA CATGTGATGT TACTTGATCA TCACGCGTTG 120  
 CCATGGTATG CAAGTGCTGC GATAAATCTG CGGCACCTTC GACTATCATG CTAACCTTCG 180  
 CTTGTnnATA TCGCAATGGC ATACCCCTTC AACATCTTCT ATCATGG 227

## (2) INFORMATION FOR SEQ ID NO: 3132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3132:

ATCGCAGTGA TGnnATCATC TGCTGCTGTA GcnTAGCAGG TTCAATTTCA TTTATCGGAT 60  
 TAATGGGTCC GCATATTGCC AAACGTATCG TTGGACCACG TCACCAGTTG TATTAACCAA 120  
 TTGCCATTTT AGTAGGGGCA TGTATACTTG TAATAGCTGA TACAATTGGC CAAAATTGTA 180  
 TTACAACCAG GTGGGGTTCC AGC 203

## (2) INFORMATION FOR SEQ ID NO: 3133:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3133:

AGCATTTAGT TTAGCGGCAG TAGCTGCAGA TGCACCGGTA GCTGGCACAG ATATTACGAA 60  
 TCAnTTGACG AATGTCACAG TTGGTATTGA CTCTGGTACG ACTGTGTATC CGGACCAAGC 120  
 AGGTTATGTC AAACTGAATT ATGGTTTTcn AGTGCTAATT CTGCTGTAA GGTGACACAT 180  
 TCAAAATACT GTACCTAAGG A 201



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3134:

CATTTGTAAC TGTTATTGTT TATAACTTCT GTGTGAAGCG CAATATTACA ATTAAAATGC 60  
 CGAAAGAGGT ACCGnCGAAT ATTTACAAG TATTTAGGAC TTAATTCCAT TTTCAGCGGT 120  
 AATCATCATT CTTTATGCAT TAGGATTnG TCAATCGCAA CCAGCTTTAA ATCAAAATGT 180  
 AGCGGAGGTA TTTTAAAATT ATTCGGT 207

## (2) INFORMATION FOR SEQ ID NO: 3135:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3135:

AACACCTTTA GGTCGTGCAG GTCAACCTGT TGAGTTATGT GGTACTTATG TGCTATTAGC 60  
 GTCAGAAGGA ATCAAGTTAT ACAACCGGAC AAGTnTTCCG TGTTAGCGGT GGAGTGCAAn 120  
 TAGGTTAGGT TTGTATGAGC TTTTAATTGA GCACCATAAT GTTAATTTAG TTACTTCAAT 180  
 CCATTAAATT AAATGAATTG GTG 203

## (2) INFORMATION FOR SEQ ID NO: 3136:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3136:

CACATCCAAT GCAnTCTACT AAATCAGACA CACCACAATC TCCAACCATA AnACAAGCAC 60  
 AAACAGATAT GACTCCTAAA TATGAGGTTT AAGAGCGTAT TATACAAAAC CGAGTTTTGA 120  
 ATTTGAAAGC AGTTTGGATT TATGCTCAAA CCATGGACGA CGGTTAGGTT TATGATGTTA 180  
 TTCCAATAGG TTCACTATAA ATAGCTTAGT T 211

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3137:

ATTGGGAAAT GTTCCCCAC CACCTACAAT TTGTGAATAC AAACAATACG TATTGCAATG 60  
 GACTTTACCT GGGCTTACCA AGTGAATGTA TACGTCACGT ATGATACGAT TGTAGTTGnA 120  
 AAATAATGCG AACAGAAAAT CGTTATAAGT ACAAATAATA CAGGTGACTC AACTCCTGCT 180  
 TTTAGATTAA CAAATCTCCA ACCGATACAA TGAGTGCTTG CAACATACCA AGCATTATAA 240  
 AGAATCCTGC CTTACCTAAG 260

## (2) INFORMATION FOR SEQ ID NO: 3138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3138:

CATAAGCAAT TAATGACTTC GTTAATTGCG AAAGTGTATC TTTTGTATTG TCATTCGCTT 60  
 TTGCATCTTC AAGCTTTCTC ACATCTGATT TGACAGCATT ACTTTCACTA TTATCTTCAA 120  
 GCGATAATTT CTTAACTGCA CTTACCACTT GCTCAATTGC TTCTGCTnTAT TGTCATTGCA 180  
 TATCGGAGTA GTAGGAAGTG CnGAATTCGG CA 212

## (2) INFORMATION FOR SEQ ID NO: 3139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3139:

TATTGGTTTT TATGCGAATA TGGATAATAA AAGGTCTCAC GACATCATTTG ATAAATCGCT 60  
 TGAATATGTTG CGACGCTTAG ATCACAGGGG CGGGGTCGGC GCAGATGGCA TCACTGGTGA 120  
 TGGCGCAGGT ATTATGACTG AAATACCTTT TGCATTTTTTC AAACAACATG TAACGGAGGA 180

GCACCTGTTA GAAAAGAAGG GAAATTACCT CGTGAAGTCA TTCGTTATGA GTATGACCTA 300  
 GAATATGGTA CAAATGTTTT AACAAATGGCA CAAAGATGCA ATTGAAACCA GGTnCAACGT 360  
 5 GTGTTAnTAC AGG 373

## (2) INFORMATION FOR SEQ ID NO: 3140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3140:

AGCCTTATAA TAAAGTGCCT TTCATAGCAA TAAGTTGTGT CCATTGACCT ATTACATTTT 60  
 20 TCGTTTTGTA CATTAAATAT AAGAAATACG GTGCACCAAT AATTGCTACG ACAATACCTG 120  
 CTGGAACCCC CACCTGGTTG TAATACCATT TTGGCCATTT GTATCAGCTA TAACCAAGTA 180  
 ACnTGCCCC AACTAAAATG GCATTGGGTA AAACCAnTG 220

## (2) INFORMATION FOR SEQ ID NO: 3141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3141:

GAGGAGCAGC ACAACCAAAT ACACAACCAG CTGGACAAGG TGATCAAGCT GATCCGAATA 60  
 ACGCTGCACA ACACAACCTG GAAATCAAGC AACACCGGCA AACCAAGCAG GTCAAGGnAA 120  
 40 TAACCAAGCA ACACCTAATA ATAATGCAAC ACCGGCAAAT CAAACACAGC CAGCGAT 177

## (2) INFORMATION FOR SEQ ID NO: 3142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3142:

CTTTTTTAGC ATTTGGTTTA ACAACnGGT GTTGCAGTAT CCCCACTTAA GGTCTGTATA 60

ATTTTCATTTT TATGTTCTC GATAACTTGT ATTGCTGCTT GTTTTCCTCC ATCTGTCAAT 180  
 CCATCATTTG ATTGAGAGAA nCAG 204

(2) INFORMATION FOR SEQ ID NO: 3143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3143:

GTGATGCCAT ATAAATTGGC AATAATGGCA CAAGTACTGT CAGTCCAGCA ATCGCTATAA 60  
 ACTGACTGAG CCATAAAATG CGAAAGTTAC TGCGCCATAT AGACTGATTA ATCATATGTC 120  
 ACCATTGGAT TTGGTACGGT AGTTAAACCT GAAGGCATAC TACCCTCCAC CCACTTATTC 180  
 AACGTTGGAT nATAGGCAAT GGGTAATTAA AAATTTTGT TTTGAAATGG GCCCACGGGC 240  
 TTGTTTTAAT CAAAATTAAA AAATTGTGGT nCTTGGACC 279

(2) INFORMATION FOR SEQ ID NO: 3144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3144:

TGACTTAATC AAAGCATTTG ATCAAAACAC CAGAATACCA TTATTCTTTA ATATGTTGTA 60  
 CAGTAAACTC TnTATTATTT GTTGCTGTTG GATCCATTGT TCGTCTTTCA ACAAAAACnT 120  
 GACCCAGAAT GAAGTCCGAT AGAGTCAACA AAGCtATAGT ATTTGTAACC ATCTTTTAGT 180  
 TGATaAATGC CACGCGCATC TGTTATTGCG TCATTTTtag GTAcAAATTG AATTTkGAGA 240  
 TTTCTCaCaT TATCAGGTAC TTAAATAAA CGCAAAGTTG GACCGnCTTC AACAGTCTTT 300  
 TCAGCAATCG TATCATTAGT ATCAGCATTT TTGATAATAA CATTTGTTGC GCCTTGACCG 360  
 TTTTtagTAG TCATTGTATT AAATCAAGGT TAATTCAGAA TTCGGATTTA CTGTTAATGC 420  
 TTTCTCGATA CCATTAAAAT CGCCATGGTC ATTCGTATCA GTTCCAGTAT ACGGCCTAAT 480  
 GCAATACATT TGCCTGTGcN TGATAGTnCT TATT 514

(2) INFORMATION FOR SEQ ID NO: 3145:

(A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3145:

10 ATTCACTT TGCATGTGGA ATGGCCACGT TCATGCCAAT AGCTGTCGTA CTCCCATTTTC 60  
 ACGTTCTAGT ATTGCATTTT TTAAATGCGA TGTGTGCTCT ACATAACGGC AAATTTTAAAG 120  
 TTTTATGAAT CAACATATCC AATGGCTTCG GTTTCGAGAC ATGTCCGTGG ATTCAGTAAT 180  
 15 TAACCATAGT TTGGTTGGAT CCAAAACCAT GAGnAGGGTT TAATGGAGGA TGTnGAATGG 240  
 TTCnCCGGTG GTTAATCCTA CATGGTCCAC CCTCCTGGTA ACCATGGTGG TGGTAATAAC 300  
 CC 302

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(2) INFORMATION FOR SEQ ID NO: 3146:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 332 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3146:

30 CAGGAATAGG ATCATTGCA TCCATAGCTT CACTTATTTT TTCAGAAGCT AGCGTACAAT 60  
 CATTTAAATC TACGCCACCT TCTTTATCAA TAGAGATTCT AAGAAAATGA TCTCTACCCT 120  
 35 CTTTGACCAT ATTCAACGTC TACAAGTTCC AAAATTCAAG GTCTTCCCAT AATTGGGTTT 180  
 AACCAATCCA CTTTCTACCT GGTTCGCGT AAATTTTAC CTCCATACCA GGGnCTCCC 240  
 CCTTTTTTGG GCCAAAATAG GAAAAAnGAG GCGGGGGAAA TCCTCCCCC AATTCCnTTC 300  
 40 CTGGCCCTGG AGGTTTCCAC CTAAATTTT TT 332

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(2) INFORMATION FOR SEQ ID NO: 3147:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3147:

GAGAGTGGTT AACAAGCAAA TAGAAATAAT TAAAAATGCA GATGCAGATG CATCGGCGAA 60

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CnCCAAACAAA TGCAGAAGTT GCTGAATTCC AAATGTAACG ATACCTGCCC ATGAGCGATG 180  
 TGCTCAGAAT GATCAGAGCT AATG 204

(2) INFORMATION FOR SEQ ID NO: 3148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3148:

CAACCGGGAC AGGTGGGGTT ATTGGACGTT ATTTTGGCC TTTGGATTTT AAGATATTGG 60  
 TCGAAAAGAG ATTACATAAA ATTGTGGCCA AATGCGGATT GCATATTATT GTAACGCCGn 120  
 CTATTGCATT GTTGATTGTT AGGnCTATTA ACTATCTGGA TCTGTATGCC ATTAGCCAGG 180  
 TTTTGTTCa GACAGTTTAG TTTCAGTAGT TAACGGA 217

(2) INFORMATION FOR SEQ ID NO: 3149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 174 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3149:

CTATTATTAT ATTCCGCGGT GTACGTATAT GTGCTACGTT ATCTTCGTTA ATTGTACCGA 60  
 TTATGGCTAT CATTTACATT GGTATGGTTT TAGTAATATT GCTATTTAAT TTAGATCAAA 120  
 TTGTTCTAT GATAGGTCAC GATTATTAAn AGTGCATTTG GTCATCGAAC AAGT 174

(2) INFORMATION FOR SEQ ID NO: 3150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 181 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3150:

GGGACCGAAT TGACTTCAGC ATTACCAGCA AATTGATTAA TnTTGTGGGC TGGTATTGGC 60  
 TCTGGCGGTA CCATTTACAG GTACCGCAGC TTATTAAAGC AACATCACGG GCAATGTTAT 120

A

181

## (2) INFORMATION FOR SEQ ID NO: 3151:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3151:

GTTTTAATTG AGCGACATAC TCTTCTGTTA GCTCTGCTAC TTTTAAAAAT AGAGCGATTG 60  
 ACATCAAACA TAACTGCTAA ACGCTCAACG TCTGCCTTCG TAATGGCTTT TGTAGAAATT 120  
 CTAACTAAAT AATTTCGAAT GCTATCATTG GTTGTnTCAA CAGCTTGATG CT 172

## (2) INFORMATION FOR SEQ ID NO: 3152:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3152:

ATGGACGTTG AGACATTTAT AAGCGATATA GATTTGCGCAT GTTGCAATTTA TTAAACCTAA 60  
 TAATGGTAAA CGACAAGTGT GACTGTTACT GGACTTTAAT GAAGGTAGTA ATCAGAATGG 120  
 AAATCAACCA AAAGTAGGTA TTTGAATnTT GGGAATAATG AGACATAGCG AGAGTGTATA 180  
 TGCAATACGA CAGTACTnTA AATTAAGAG 209

## (2) INFORMATION FOR SEQ ID NO: 3153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 174 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3153:

TTCTCACAAA GCGCTCAGTT GAAGTAAATC CACCTGGACA ATCCAAATGT ACCTGCTTCA 60  
 TTGCCTAAAG GTTCAATCGT TAnACCTTCC AATAAATTTG CTGTTGCTGG ATAAGGAGAA 120  
 ATTATTGGTA TATTGTCTTA AATTACTATG ATGCCAATTT AAGGTCTGGA TGAT 174

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3154:

GGATCACATC GTTCATTTAC ACAATCTATT AATATTCAAT GGCACAATAT AGTGTTTATG 60  
 GCATTACGGA TATGATTTAG TAGCnCACCA TTATTAACCG ATCTCTATCT GTTAAAAGGA 120  
 ACTTAAGAGC AATGTTTGCG CATCATCATT TTATGTTGCG TCTTTGCACG AGTTTTGCGA 180  
 AACTTTACAA TATTTGTTGC GGATGATTAT TTAACTTTGT GAGAATGTTG ATGGCACAGT 240  
 CCACTATAnC AATCAGTATC GCAATGG 267

## (2) INFORMATION FOR SEQ ID NO: 3155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3155:

AATTAAAAAT CAAGCAACTG CTGCAAAAAT GCAAGATCAA ACTGTTTCCTC AAGAAGCAAA 60  
 TTCTCAAGTA GATAATAAAA CAACGAATGA TGCTAATAGC ATAGCAACAA ACAGTGAGCT 120  
 TAAAAATTCT CAAACATTAG ATTTACCACA ATCATCACCA CAAACGATTT CCAATGCGCA 180  
 AGGAACTAGT AAACCAAGTG TTAGAACGAG AGCTGTACGT GTTtAGCTGT TGCTGAACCG 240  
 GTAGTAAATG CTGCTGATGC TAAAGGTACA AATGTAAATG ATAAAGTTAC GGCAAGTAAT 300  
 TTCAAGTTAG AAAAGACTAC ATTTGACCCT AATCAAAGTG GTAACACATT TATGGCGGCA 360  
 AATTTTACAG TGACAGATAA gTGAAAYCAG GGgATTATTT TmCacGAgTT ACCAGATatT 420  
 TActGGTAAT GGAGACGTGG GATTATTCTA ATTCAnATAA TACGATGCCA ATTGCAGACA 480  
 TTAAAAGTAC 490

## (2) INFORMATION FOR SEQ ID NO: 3156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3156:

CCTTCAGTAC CTTGTAATAG TTAnTTAAAT GTTCCGATCA TCGTGTAGTG TGATTTCATCA 60  
 5 TACCGGCCTT TTCAATTGAA TACGATCTAA ACCGTTTCGT CAGGTGCTAG TAAGTTACCT 120  
 TCGCCACCTA AATAAGAAGT TCACTCGTTA CGATTTTTTC AGATAGCATC ATTGGTGGAT 180  
 TCGTAACTTG TGCAACAGCT GTTTAAGTAT TAATAGTGAT TCGGTCGTCT TCACATGCAT 240  
 10 TGGCGCACAA TCCnTGCACC GT 262

## (2) INFORMATION FOR SEQ ID NO: 3157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3157:

ATGGTAAAAA TTGCACTATC TGCTCGGGAA ACGATTTTGC ATAACCTATT GTTAATTTTT 60  
 25 TACCTGTTGA TTTAGCTGTA TCTGnCCATT TTTTGAGCTT CTGCTGTCGT TTTAGCCATT 120  
 GGGTTTTTAC ACATCACATG TTTACCAGCA TGCAACCCTG GCTACAGTAA 170

## (2) INFORMATION FOR SEQ ID NO: 3158:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3158:

CCAGGCAGAG GAGCAGCACA CCAATACACA ACCAGCTGGA CAAGTGATCA GCTGATCCGA 60  
 40 ATAACGTGCA CAAGACAACC TGAATCAAG CAACACCGGC AACCAAGCAG GTCAAGGAAT 120  
 ACCAAGCAAC ACTAATATAA TGCACACCGG CAAATCAACA CAGCAGCGAA TGTCCAGCAG 180  
 45 CAGCGAACCA GCAGCACTGT AGCAGCAACG ACAACTCAGn CCAATGTAGC ATATGGTGAG 240  
 GCAGTTTATA GACATACATT GTGnCCTGCA TTCACAGTGG ATAGCAGGTC CACTGTACTG 300  
 TACAGTAAGT An 312

## (2) INFORMATION FOR SEQ ID NO: 3159:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3159:

AATCACATCA AAAACTTCAA TTGTTTACGT TGGCAACTAA CTTTATGTTA GAACGCACAC 60  
AATATCTAAT GTTTAAAAATC TATCGTCGCA AGATGCTTCC TGnTAATTAT CAGTGCCATT 120  
TTCGATTGGG TTATACAATC TAGTAATCGC ATGATAATTT AATGCTACAA G 171

(2) INFORMATION FOR SEQ ID NO: 3160:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 211 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3160:

CTTGTTTCATT TAATCCATAT AGTATACGAC GATGTACTGG TTTTAAACCG TCACGAACAT 60  
CTGGCAATGC ACGAGCAACG ATAACACTCA TCGCATAATC TAAAAATGAT TCACGCATTT 120  
CACTGGTAAT ATTTCTGTTCA TTAATCnTGA TTGAGGGAAT TCCGCCCATC CAGAnGTCCC 180  
CCCTCCAAAG TTCAGTTCCA CAGGGGCTAG A 211

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(2) INFORMATION FOR SEQ ID NO: 3161:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 321 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3161:

GCACAGGTAG CGGTAGTGGC GGTCGTATGA TGACTTTGGT AATCTAAAGC AAAATGTACG 60  
ATAATAATAA ACGTCGTTTC GTTCTCTGA TGTAGCAGGG GCAGTGAAGA AACAAGATTA 120  
TTGAATTGTT GATTTCTTGA AGATATAAAA ATTCAAGAAT GGGTCTAGGA TTCCTAAGGT 180  
GTCTTCTTTT GGGCTCAGTA CGTAAACATA TTGTAGAGCG TGCAGTGAGT GGCGCACCAT 240  
CTCTTTTGGG TCAGnTTTGG AGTTTGTGTT GTCGGCTGTC GGATThTCGT ATGTAGGAAC 300  
GGCTGTTTAC TThCGTGGAT G 321

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(2) INFORMATION FOR SEQ ID NO: 3162:

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(A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3162:

10 AACATTTGAG CAATATCAAG AAACATTAGA GTATATTTTA TCCCATCATG TAACTCGTAA 60  
 TACAGCAATT ATTGCTTTGG GTGGTGGTGC ACTGGTGATT TTGCTGGGTT TATTGCGGCG 120  
 ACACTTTAC GAGGCGTGCA CTTTATACAA GTGCCAnCG 159

15 (2) INFORMATION FOR SEQ ID NO: 3163:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3163:

25 GTCAGTTATG GCAAGTGCAT CAACATTTTC AGACACAGAC AAGTCTTACG GCATCTTCTA 60  
 TTTTAAAGCT TGAAATTTAA CAAATCATAA GCCGTATGAA TATTAAATA TGCCACCATG 120  
 ATTGAATGGC CCCTTTCTAT TAGTTAnGTT TTGTGCG 157

30

(2) INFORMATION FOR SEQ ID NO: 3164:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 216 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3164:

40 TATAAAAATA TAACGCGGAC AAAAAAGTGA GTTATTACTG ACAAAGTATn TGAGATTGTA 60  
 ACAGGATATA TGAAGCAATA TCAGTTGATC CAACTGTCAT AGGTATTTCA TCAGCAGGnG 120  
 45 TTGTTGATGA ACAAAAAGCG AAATTGTATA GCAGGCCAAC ATTCCGATTA TAAAGGTATA 180  
 ATTTTAAGGA TTATTAAAAT CATGTCTCTT ATGTCA 216

(2) INFORMATION FOR SEQ ID NO: 3165:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3165:

5 AGAAACACTT CTATTGAATC GTCTTACTGC TGTTCCTCTAT TTATAACACT TCGTATTGAA 60  
TGAATTCATT ATGCCTATTT GACACATTAT TGAAGTTTTTC CTAATGCCTG GATCCTTTAT 120  
ACGTTACGGC TTCGTGCTAT GTTTTGGTAC ATAAAGCTTT GACATATCGA nATTC 175

10 (2) INFORMATION FOR SEQ ID NO: 3166:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 160 base pairs  
(B) TYPE: nucleic acid  
15 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3166:

ACTGTTACAA CAAATTAAAA ATACAACAAG CGAGATATAG TTATTGTTGC TGGAnTGTAC 60  
CAAGTAGTAT TCCAAGCGAT GCTATGGCAA ATTGCACAAA TTACAGCACA GACAGGTGCT 120  
25 AAATTAGTAG TCGACGCTGA AAAAGAATTG GGCTGAAAGT 160

(2) INFORMATION FOR SEQ ID NO: 3167:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 156 base pairs  
30 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3167:

TGTGGGGGAA ACCTGCACAG CAAAACTAA AGCTTATCGA TACATCTAAA CATTGTATTA 60  
TAAAATCAGT GCATCCTAGT CCACTGTCTG CATATAGAGG ATTCTTTGGA TCAAAACCGT 120  
40 ATTCCAAAGC GAATGCCTAT TTAGCGTCAG TAGGnA 156

(2) INFORMATION FOR SEQ ID NO: 3168:

45 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 174 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3168:

55

GTGGCGAGAA ATACCGCAAG CATAAAGATA TCTTTGATCC AACTTACCAA CAGATCAACG 120

GAAAAGTACC AGGTAACCAG GAATCAAGAT CCAGACACAG GAAAAGTGAT CGAG 174

(2) INFORMATION FOR SEQ ID NO: 3169:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 213 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3169:

TCAAACGGGG TCAATTTCAA ATGGAAAAAT TATACCGCAT CTTCTCCTGA TAACTACGTG 60

ACCTTATCTT CTTTATATTT GCAGACCACG AACATTCAAA CTGCATGCTT GCTCGATTGG 120

CAATGTCATA TAACTAGTAA CATGATCATC nCATCAAATT TAGTATGTCA AATGTCCCAA 180

TCaNTAATTT GATCGGTGTT GCTCAATTGA TTA 213

(2) INFORMATION FOR SEQ ID NO: 3170:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 380 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3170:

AAAGCACCTT TTCCTAATGA AAGTTGTGCT ACTGGTATCT GTGTTTGATT TACAAAATCT 60

TCTAATTCTT GATGGAGGTG AAAACTGTTA ATTTTCATGTC CAGTAATGAT GATAGGCTGC 120

TTGCTTGAT GCAGTTTAGT TGCTAATAAC TCTATATATG TTGATGCATC CGTATATTTA 180

GTTGCCGTCA CTTCAAATGG TGTCGGTATC TCAATTTTCAAG AGATTGCGAC ATCGATTGGT 240

AAATGTAAAt GAACTGGGCG TCTTTCGGCG ATTGCTGTAT TAATTAAACG TGGTATTTTCG 300

GTTGTTGCAT TTTAGGTGT GATATAACCT GTGCACGnTT ATATGTGCAA ACATTTTTTCG 360

ATAGTCGTCA AATGTACCnn 380

(2) INFORMATION FOR SEQ ID NO: 3171:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 401 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3171:

5 TAGAAGGTAA GAAGGATCCT ATCGGTGCAA TGGGATATGA TGCGCCAATT GCAGTGTGTA 60  
 ACGAGCGACC AGAATCACTA TTTAATTACT TTAAACAGCT GTTTGCACAA GTTACGAATC 120  
 CACCAATTGA TCGGTATCGT GAAAAAATCG TAACGwGTGA ACTTTCTTAT TTAGGTGGCG 180  
 10 AAGGTAAGTT ACTAGCACCT GACGAAACGG TTTTAGATCG TATTCAATTG AAAAGGCCCG 240  
 TATTGAATGA ATCACACTTA GCAGCGATTG ATCAGGAACA TTTTAAATT AACTTATTTA 300  
 TCAACGGTAT ATGAAGGGGG ATTTGGGAAG ATGCGTTAGA AGCATTAGGC CGAGAAGCAG 360  
 15 TGGAATGCTG TTAAGCAAGG GCGCTCCAA TTCCTAGTGG T 401

## (2) INFORMATION FOR SEQ ID NO: 3172:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3172:

25 ACATAATTTA AAATAATATT ACATTTGTAA TGGnCACCAA GTAACGTTTC GGTGCTTGG 60  
 30 TGTTTTTTTGG TATGAATTAC TTTCTGTAC AAAACAATCT AAAGCGTTCT GTTATGTTTT 120  
 ATTAAGATTT AATTACAAAC GGAAACTAAA TGTAATAGAA TAAACT 166

## (2) INFORMATION FOR SEQ ID NO: 3173:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3173:

45 ATAATGAGAn TGTTGTACGT TATGGTGGTG GAAGTGCTGA TGGTGATTCA GCAGTAAATC 60  
 CGAAAGACCC AACTCCAGGG ACCGCCGGTT GACCCAGAAC CAAGTCCAGA CCCAGAACCA 120  
 GAACCAACGA CCAGATACCA GAACCAAGTA CCAGACCCAG 160

## (2) INFORMATION FOR SEQ ID NO: 3174:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3174:

CTTTATATAA AGAAGGAATT ACTAAACATA CAGTTAGATT ACTTCATGCA ATCGAATTAG 60  
 AACGTTTGAA TTTAAGCCGT AGATTAGGTT TTGAATTATC AACAGCnAAA GAATCACGTA 120  
 TTGAACGGGG GTTATTTAGA ACGTGATAAA GAAGGATG 158

(2) INFORMATION FOR SEQ ID NO: 3175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3175:

TATTTGAAGA TGGCTGTGTA CAAAATCGG TGTTACGTGA TCATGATACT GTCAGAATTT 60  
 ATAAACCATG GCTAACAGCA CATCAGCTTT CATTGCCnA GTATGTCGTC AGAGAAGATA 120  
 CACCTAATCG CTAATTAATG AGGTTTGGAA ACAT 154

(2) INFORMATION FOR SEQ ID NO: 3176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3176:

AGAAGGTATT TTAGCTCAAT CTCCAGGTCT AAAGGTTGTT ATTCCTTCAG CCCATACGnT 60  
 GCGAAAGGTT TATTAATTTT TTCTATTAGA AGTAATGACC CAGTCGTATA CTTAGAGCAT 120  
 ATGAAATTGT ATCGTTTCATT CCGTGAAGAA GTACCTGAAG AAGAATATAC AATTGACATT 180  
 GGTAAGGCTA ATGTGAAAAA AGAAGGTAAT GACATTTCAA TCATCACATA CCGTGCAATG 240  
 GTTCAAGAAT CAATGAAAGC TGCAGAAGAA CTTGAAAAAG ATGGTTATTC TGTGAAGTA 300  
 ATTGACTTAC GTACTGTTCA ACCAATCGAT GTTGACACAA TTGTAGCTTC AGTTGAAAAA 360  
 CTGGTCGTGC AGTTGTAGTC AAGAAGCACA CGTCAAGCTG GTGTTGGTGC ACAGTTGTAG 420  
 CTGAATTAGT GACGTGCATC CCTTCATTAG AAnnCCTATG GAAGAGTGCA CA 472

(2) INFORMATION FOR SEQ ID NO: 3177:

(A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3177:

10 TGAAAGCTGG CGAATACAGT GATTGTCATG ATGCGGATCT AnTTGTCATC TGTGCTGGTG 60  
 CTGCACAAAA ACCTGAGAGA AACACGTTTA GATTTAGTAT CTAAAACTT GAAAAATATTC 120  
 AAATCAATTG TTGGTGAAGT AATGGCATCA 150

15 (2) INFORMATION FOR SEQ ID NO: 3178:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3178:

25 TTACTCTATC TTGATTGAC GAAATACTAT TAnGCTAATA TCGATATTTT AAAAACGAGA 60  
 TGATGTTCCA AAGCAAGCCA TTTCGATGGA CTGCTAATAT TCTTCAGCCA AACGTATCAT 120  
 30 TTTACTCGCA TTTGGTGAAA AGAAACGGCT GCTATTACAC ATTTAT 166

(2) INFORMATION FOR SEQ ID NO: 3179:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3179:

40 CTTGACTCT AGAGGATCCC CGCGCTCAAA TTCTAGTGTT AGATGATAGT GGATTAGTTG 60  
 ATAGCAATGG CTTTGCAATG CCGATGTTAC TCGCAATAAG TCATGTGCAT CAATTACTTA 120  
 45 TTAAAGCAGA TTTACGTATG TCTACAAGTT TAnTTGCTA AATCTGGTGA 170

(2) INFORMATION FOR SEQ ID NO: 3180:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 297 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3180:

AGCTAAGGTT GCCnTGGGCG TTGCCCCAnT TGGTTAGTCC AGGTGGTTCGC GGTGGCCATC 60  
 5 GGTGTATTCG CCAGGTCCTT CAGCCAGGGT TTTTACTATT ATATCCAGTT GTAGCAITCA 120  
 TGATTGGGGC GATTCGAGAT AGATTCATCA ATGAAATTAA TTTCTGGATT TTATTCGTTG 180  
 GTATTTATTT GGGTATACAT AAGTATGGTA CATGATAGGC AGATATACAA CATTACAACA 240  
 10 TTCATTCTAC TATGCTGGAA ATAACATGAC AGTGATGACA CTACTATCCC CGTCGCA 297

## (2) INFORMATION FOR SEQ ID NO: 3181:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3181:

CACTAGGTAC CCCAAAACGC CAGAGGAACT TGGTTAAATC GCACTTACTT GGTGGCTCCA 60  
 25 ATCAACTGGT ACTTCATAAC GTTTGGCATC TTCGCCACTT CACCACTATT ACTCTTTCCA 120  
 CCTAATTGGT TCATGGCTTG TGCTAACGTT TCATGTGCTT CCGCTGAAAT CGATCCATAA 180  
 CTCATCGCCC CTGTATTAAA GCGTTTGACA ATGTCACTTA CCGGTTCAAC TTGGTCGATG 240  
 30 TCAATCGgTG TACATGCTTT AAATTCAAGT AAATGTCTAA TGTGaTCTGT TCTATTTTTG 300  
 TTnCACCGnT TnCAGAGTAT GCTTTAAATT GCGCCATAGT CCATTTTCT 349

## (2) INFORMATION FOR SEQ ID NO: 3182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3182:

TACCAACACG TACACCTTCT AAAATAACTG CATTTGCACC GTnTTAATAC ATCATCCTCG 60  
 45 TTTATAACCG GTGTAAGCAC TAGGGGGTTC AATCACACCT GCTAATACTG CGCCAGCCCT 120  
 ACATGTACAT TTTTACCACT TGTAGCACG 149

## (2) INFORMATION FOR SEQ ID NO: 3183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3183:

GCGGTGCCGG TGTGCAATT GCGCAGTGG TGTGCTAGC ATGTGGTCTT TCAATCAATG 60  
TTCAATACAC CAGGAGATCC GGAAAAGATG CGTATGAATT TTATGGTAAG TGCACCAGGC 120  
ATTACCACAC CACGCAAnAA CATGCAT 147

(2) INFORMATION FOR SEQ ID NO: 3184:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 180 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3184:

CAGCGATATG TTGGCGTTGA AAATCTGCAA TTTGTTTCATA ATTCTCTGTT AAAGAACGAC 60  
TTAAATTGAT AAAAATGGAT ACGATCTCTT GGTAAACAGT GACATTTTCT CAATCGGCGT 120  
ATGATGTTTG TGGCACCGAC CATCGAGAAC ATGAAAATCT CATGTCCCAC GCTAGTCGnC 180

(2) INFORMATION FOR SEQ ID NO: 3185:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 150 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3185:

GGTAAATACG TATTAATCAG ATTAAGATCT GGTGAAGTTC GTATGATCTT ATCTACTTGG 60  
CCGTGCTACA ATCGGGnCAA GTTGGTAACC TACAACACGG GTTAGTTAAC GTTGGTAAAG 120  
CCGGCACGTT CAAGATGGGA AAGGTATCCG 150

45

(2) INFORMATION FOR SEQ ID NO: 3186:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 146 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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55

GAATTTnAGG TGAATCAGAA GATTAAACGCT GTTGCCTCCT AAGCTAACAG ATACTGGTTC 60  
 GTCAGTTGTC GTTGAAAAAG CGAATGAACA ATTTAATAAA ACCGTAACTC GAGCATTATT 120  
 5 AGAGGAAGCT AACCAAAGCA GGTTTA 146

(2) INFORMATION FOR SEQ ID NO: 3187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3187:

AAATTGGCGA GTATGTTGTT ATTGGGTCAG TACTCTGAAA TTAACAATAG nTACGATTGA 60  
 20 AAATGGTGTC ATGTATTCAA CAGTCTGTTG TTAATGTATG CTAGTCGTGG TCGGAATACT 120  
 AAGGTCGGAC CGTTTGCGCA ATTGAGACCA GCGCGCAAT TAGGG 165

(2) INFORMATION FOR SEQ ID NO: 3188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3188:

CAGTTTAGTG GAGACGAATC TAAACGAAAC AAAGCGATTG GACGTGCATC AGTTGTACCA 60  
 35 ACATTCTTTG GTGTAAACGn AACCAATTTT ATTTGGTGCC ACCACTAGTT ATTGGAATCC 120  
 TGTGTTCTTT ATTCCATTTG TATTAGCACC AATTGTTAAC GTATGG 166

(2) INFORMATION FOR SEQ ID NO: 3189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3189:

AACCCTTTAT CTAATCCATT TTCAGTTAAG CGATGACCGC CTGCTAAAAT TTGTGCATCT 60  
 GATTCTTTTG CTGCATCAAT ATATGATTGA ATTTTATCTA ATTGATCCTT ACCAGTTTGA 120

## (2) INFORMATION FOR SEQ ID NO: 3190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3190:

TCCCCCAAAG GGTTTAAGGG GTTAACCCGG GTTGGGAAA AATTTTTTAA CCCCCCTTAA 60  
 AnTTCCCGGG AAAAAGGAAA CCCGGGTTTT TAAAAAAAC CCGGGGTTCC CAAAAATTTT 120  
 TTGGGAAAGG GAAAGGAAAA AAGGGTTAAA AAATTTTGG GAAAAACCCG GGCCCAAAAA 180  
 AAAGGGTTTT TTTCCCTTA AAAAAATTT AA 212

## (2) INFORMATION FOR SEQ ID NO: 3191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3191:

CTTCACTGAC TTTAGCAATT TCATCACCTT TTGCCCTAC AACGATAGCT AATGATTTAT 60  
 ATTGTAAACT CAATGACCT TGTGAATAC CTTCTGACAC AAGCGCGCA CATGCTGCAA 120  
 AGTTTTGCGC TAAACCAACG GCAGCAAC 148

## (2) INFORMATION FOR SEQ ID NO: 3192:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3192:

CTGCTAATCC GAAATCTTTT TGGAGTTTTA TTAAACCAGC TGCTTCTAAT AGTTTAAGTG 60  
 CACGTGCTTG GTTTGACACA TCATTGGAA TGACAACTTT AGCnCCATCT TTAACCTTTT 120  
 TGACATCTTT AATTTTATCT GCAGAAATAA ATCCATCACG GATGGCTCTT AAATATATGT 180  
 TACGTGATAA TTTCTCGAnA AATGGCTTCC CT 212

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3193:

TCGTGCAGTG GTCTTCTGTT AATTGGTGAA TTTGGATACT GGTATATTC AGCTGCACCG 60  
 CAAGCAACTT CTATTGATGG CCnAACTGCC TTTTACCTC AAGCAATGGG TATGGTAGTT 120  
 GTTGCAGTCA TTTATGGCTT T 141

## (2) INFORMATION FOR SEQ ID NO: 3194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1290 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3194:

AATAACGTTT TGAAAAACGA AGATGTTTTA AATGCCTATA TCCGCGGTCTG TGGCGGAATG 60  
 GCAGACGCGC TAGGTTGAGG GCCTAGTGGG AGAAATCCCG TGGAGGTTCA AGTCCTCTCG 120  
 GCCGCATCAA AATTCTTAAT TTAAATAAGC GGGTGTAGTT TAATGGCAAA ACCTCAGCCT 180  
 TCCAAGCTGA TGTTGTGGGT TCGATTCCCA TCACCCGCTC CATAGATAAT TTTAATGAAC 240  
 ATTGAAAACCT GAATGACAAT ATGTCAACGT TAATTCCAAA AACGTAACCTA TAAGTTACAA 300  
 ACATTATTTA GTATTTATGA GCTAATCAAA CATCATAATT TTTATGGAGA GTTTGATCCT 360  
 GGCTCAGGAT GAACGCTGGC GCGTGCCTA ATACATGCAA GTCGAGCGAA CGGACGAGAA 420  
 GCTTGCTTCT CTGaTGTTAG CGGCGGACGG GTGAGTAACA CGTGGaTAAC CTACCTATAA 480  
 GACTGGGATA ACTTCGGGAA ACCGGAGCTA ATACCGGATA ATATTTTGAA CCGCATGGTT 540  
 CAAAAGTGAA AGACGGTCTT GCTGTCACTT ATAGATGGAT CCGCGCTGCA TTAGCTAGTT 600  
 GGTAAGGTAA CGGCTTACCA AGGCAACGAT GCATAGCCGA CCTGAGAGGG TGATCGGCCA 660  
 CACTGGAACCT GAGACACGGT CCAGACTCcT ACGGGAGGCA GCAGTAGGGA ATCTTCCGCA 720  
 ATGGGCGAAA GCcTGACGGA GCAACGCCGC GTGAGTGATG AAGGTCTTCG GATCGTAAAA 780  
 CTCTGTTATT AGGGAAGAAC ATATGTGTAA GTAACGTGC ACATCTTGAC GGTACCTAAT 840  
 CAGAAAGCCA CGGCTAAcAC GTGCCAGCAG CCGCGGTAAT ACGTAGGTGG CAAGCGTTAT 900

CGGCTCAACC GTGGAGGGTC ATTGGAAACT GGAAAACTTG AGTGCAGAAG AGGAAAGTGG 1020  
 AATTCCATGT GTAGCGGTGA AATGCGCAGA GATATGGAGG AACACCAGTG GCGAAGGCGA 1080  
 5 CTTTCTGGTC TGTAAC TGAC GCTGATGTGC GAAAGCGTGG GGATCAAACA GGATTAGATA 1140  
 CCCTGGTAGT CCACGCCGTA AACGATGAGT GCTAAGTGTT AGGGGGTTTC CGCCCCCTTAG 1200  
 TGCTgGCAtA ACGCATTAA G CACTCCGCCT GGGGAGTACG ACCGCAAGGT TGAAACTCAA 1260  
 10 AGGAATTGAC GGGGACCCGC ACAAGCGGTG 1290

## (2) INFORMATION FOR SEQ ID NO: 3195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3195:

TGGTACAGAG TTATCGCTGG TGGTCCTGTT CGTGCCGTAC TTGAATTATC AGGTATCACT 60  
 25 GATATCTTAA GTAAATCATT AGGATCAAAC ACACCAATCA ACATGGTTTCG TGCTAACAAT 120  
 CGATGGTTTA CnAAACCTTA 140

## (2) INFORMATION FOR SEQ ID NO: 3196:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3196:

CTATTGGATC AGGAGGCAAC TACGCTTAAG CGCAGACTGC CCATTGAAAC GCCATGCATC 60  
 GCATTTGTCTG CCTGAAGAAA TGGCATATGA GAGCTTGAAA GTAGCGGCTG ATATTTGTGT 120  
 45 CTTTACCAAC GnTAATATTG TTGTC 145

## (2) INFORMATION FOR SEQ ID NO: 3197:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TGTCGAGTTG GAATTGGACG ATTGAATATC CCATCTCCAT CACTATCAAA GTATGGGAAT 60  
 TGAATTGTTT CTAATTCGTA TCCACCTTCT GTCATTGATA ATGTAGGGTT AATTTTAGAA 120  
 5 CCATCTkCTG TTTCTAGTTT TAAGTTCCAC TTCTTACCTT CTTCCCAACG TTGACCCATT 180  
 GTGCCATTAG GTACTACTAA ACTATCGCTG ATTGCATCAT GAATAACTGG CTTCCATTCTn 240  
 CCTTGCTCTG TTGTTTGACC TAAGTCACTC GCGCTnAAAA ATCGACCCGC TTTATATCCA 300  
 10 TnTTCAGCTG 310

## (2) INFORMATION FOR SEQ ID NO: 3198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3198:

TGCTTTATTA ATGCATTGGC TAATAATCCA CTTGTACCAC CACCGGCACA AAGTACTAAG 60  
 25 AGGTTTGTTT TGTGATATTT GAAGCTTTAG TGCATCGTCT GATACACCAC TTGCCGCTAA 120  
 AATTGAATCA GCTTTTnTCG 140

## (2) INFORMATION FOR SEQ ID NO: 3199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3199:

TGGTGATTTC AAATCATGAG ACTGGGACAA AATGATGTTT TCATAAAAAT TATTTGTTG 60  
 40 TTCCACTCTC ATGATTTTTT TGATGAACAT AATTACATGA TTGATTGCAT CATTTGTTAA 120  
 AACCAGTGAT TGCAACCTGC CATTACAnG GAAAATTACC TAATAAGTGG CGTATTTACC 180  
 45 AGTC 184

## (2) INFORMATION FOR SEQ ID NO: 3200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3200:

TTGAGAAGCG TTTAGGAAGT AACGTTTAAC GACGACAGTC GTTCAATGCG ATCAAAATGT 60  
 5 TTTAACACAT GAATCGCTCT CGTACTATTC GTGTGTGACA CATGTTCTTC CAGCATTTC 120  
 TTAATGAATG CTTTTCTTC TTGGTnTTTA ATCTTTGTAA ACG 163

## (2) INFORMATION FOR SEQ ID NO: 3201:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3201:

20 GTTATGTTTG AGACTATAAT GAATAAATAT TTAGAAATAT GACTCCGATT GTTCGATGCT 60  
 TAATTCAGTT AGAAGCATCA TAAGAATGCA TGATTACTGG TGTAAGATA CGTAATGTnT 120  
 TGTATTGACT GGATGTCTTT GGATAGAGT 149

## (2) INFORMATION FOR SEQ ID NO: 3202:

- 25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3202:

35 CAAGTGA CTG AGATTACTGA AGTAAACCCG TTACCGCCAC ACTATATTG TCCGAAC TGT 60  
 AAAACGAGTG AATTTTTCAA TGATGGTTCA GTAGGATCAG ATTGATTAC CTGATAAACG 120  
 40 TGTGAAnTTG TGGAGGCCAC TATTAAAGAA GACAGAATCC GTTGAACATT TAGATAAGGG 180  
 AAAGTCCGAT TC 192

## (2) INFORMATION FOR SEQ ID NO: 3203:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3203:



CGCCATCTAA CGTTTTTTGT ATTCGTTGTT GCTGAGCTAG TTGTAAGTGC CnCATTAAAGC 120  
 ATCTTATAGC GTGATAGCCA TGCGCCAACG TACAAATCTG CTCCGTATTG TACGCACCAC 180  
 5 TAAGCAGTAC ACACCAGTAA CATTTGATAG CGTTATAGCG CAATATACAG TACA 234

(2) INFORMATION FOR SEQ ID NO: 3204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3204:

AACGCCATAA GCTACATGTA TGCTTCTTGC ATGGTTATCA TCCTCTCTTA ATGACTATCT 60  
 20 TTTAATTACG nAATGGCTTA CCAGTTTTTA ACATATGTGC AATTCTTTCA TATGATTTTT 120  
 AGATTTAGTA GCATAAGCAA TTTCTCCACG TTGATGTACG TGATGTAATG ATTCTGGG 178

(2) INFORMATION FOR SEQ ID NO: 3205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3205:

TATTAATCAC GTTGTTGTGC GTTCGTGTTT TCGCAGTATT GATTTGTTGT TCGCATTAT 60  
 GCATTGCATT ATTGTACTGC GTAATTGTAC CTGGCTTTTT ACCTTCAGTG CTTACTGGnT 120  
 CATCTAAATG ATTTTtagCT GTGATTA 147

(2) INFORMATION FOR SEQ ID NO: 3206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3206:

CAGCTGTACT AGTTGAGCGT ATTATCCAAA ACATTTTACG TGATGGCATT GATGTCGATC 60  
 GACTTTCAGT CGTAACGTTT ACAAACCTTAA GCGCACGTCA nATGAAGCAT CGTGTAGACC 120

## (2) INFORMATION FOR SEQ ID NO: 3207:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3207:

TAGGGACTTT GAAGCGGAGA GTCTAATGCA TATGGGCAGC ATTATGATCA GCAACTGCTG 60  
 AGAAAAATCC AGTTCTAGCT TGGGATTAA ATGTGGAGTG GntTAATGAA TGCATTAAGA 120  
 AGCTGCAAGA ACTTATAAGT GTGCA 145

## (2) INFORMATION FOR SEQ ID NO: 3208:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3208:

AAACGGTTTT AGATCGTATT CAATTGAAAA GGACCGGTAT TGAATGnAAT CACACTTAGC 60  
 AGCGATTGAT CAGaACATTT TAAATTAAC TATTTATCAA CGGTATATGA AGGGGATTG 120  
 GAAGATGCGT T 131

## (2) INFORMATION FOR SEQ ID NO: 3209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3209:

ATAAATTTAT CTATAATCTG TTGCTTGTTT TnCTGTTCTA CAAGTATTTT CACATTAGGT 60  
 CCCGCATCCA TTGTAAAATA ACACGGATAC CCCGCTTCTC GGCATTCTG AACAGCGCCA 120  
 TGACATCATA ACTTTCTGCA CAGTAGGAAC GGGGGTG 157

## (2) INFORMATION FOR SEQ ID NO: 3210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 143 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3210:

AACGTAATAG ATATGGTACT TACTACATGG GAGAGAGTGC TAGATTCACA AACGGCAATC 60  
10 AACCAATCAC AGTAAGAGAA GTGGGGCCAT TCTTATCTnG TCCAGTGGGT TATCAGTTCC 120  
AACCTGGTGG GTATTGTGAT TAT 143

(2) INFORMATION FOR SEQ ID NO: 3211:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 137 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3211:

ATGCATACTG TATGTGTTCC AGCATATACA ATTTTGnCCA TCTTTAATGA CAACTGTACC 60  
25 ATTTTTCACA ACATTTAATT CATCTAATTC CTTACCCTTC AAAGTTTATC TGTTGATCTC 120  
GGTAAAATTA ATTCTGC 137

30 (2) INFORMATION FOR SEQ ID NO: 3212:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 239 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3212:

ATTCACGCTT TAAAGGACGT AAATACACGA CTAGGCTGTT TACCTTTAGA TCTAAATCAG 60  
40 AACAAATTTTT TTACCATGGT GTTCCCCTTG AATTAGGAAT TTTATATAAA AATAAGCGGG 120  
45 AAGCGTTGTG CCCCCTTAC TCATAAGCTT TAATTAATGC TAAATAGTCT GACACTAGCG 180  
ATTTGATAAA ACTATACTAA AATTATTTAG AAGTCACTAA GATGCTAATG ACGACnAnT 239

(2) INFORMATION FOR SEQ ID NO: 3213:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 150 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
55 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3213:

CATCCTCAGA GTAGGAATAG CCATACCATC GAATAATTCA CGTACTGTTT CGAATTGAGG 60  
 5 TTCAAATTCT TGAGTTGTAT AGAGCTCGAA AATnTTTGCC CATTAGCATA ATCAGACTTT 120  
 TCAAAAGTCT TGATATTGA TACCCACGCT 150

## (2) INFORMATION FOR SEQ ID NO: 3214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3214:

CTAAGCATTG GTTTAAACTA ATGTTTCTAGAG CTTTnTGTGG TTTGTAAAnA CAAGTATATT 60  
 nCGAGAACAC GTTTTTGTAT AGAGTCTCAA TTATAAAAGT TAGAATAGTT GACAACAGTG 120  
 TTACGATATT ATTAAACAAC TGTcTATCAT TAACGAAAGC AATTAACAAG AGTACTTGTT 180  
 25 GTGAAATCAT CGTTTAATAG TCAAAGATGA TCATCGTAGG gTAGACAACA TATCaTTGAC 240  
 TtAAGGAAGG GGAATGACCG ATGGGATTAA AAGATCAAGC TGTTACCTGG AGAAGGTATT 300  
 TTCATCAATT TCCAGAACTA TCCGATAAAG AATTTAAGAC TACACAAAAA ATTAAAGATA 360  
 30 TTTTAACAGA ACATCATATT AGAATATTAG ACTTACCAC 399

## (2) INFORMATION FOR SEQ ID NO: 3215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3215:

CAGGTGAAAG CACAAGAGGA TTTGCTGTTT ATTTCTCTCC TGAAATTAAG AAATTCATTG 60  
 45 CAGATAATTT AGATAAATAA TTAAACTTA GACATTCACC CAATCCTGAC AAAATATACT 120  
 ATAACTAACA TTTATTAATA TATATTGCAT TATTTAATAT GCATCAAAGC CAATCAACGr 180  
 TTGATTTTCA CCAACTCAAT TGTTGATTGG TTTTATTTAT GTATGAATGA ACAACTTTTT 240  
 50 GACATCATTa AGAATATAAA TGCGTTTGAA AGCATTTGAA AGCnACAACA TTTCTATAAA 300  
 ATTTTTCAAT AACAAATTGCG CCACTAAAAC TCAAAATTTc CACCACCAAC ATCCAAATTA 360

## (2) INFORMATION FOR SEQ ID NO: 3216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3216:

AGTTGCATCA ACTGAATCCA ACGCTACGCA ATACGAATTA TTCCAATCTG GCATGCGTGT 60  
 TGGTAGAGAA ATTTTAGCGA CATCTCGAGC ACGGTTTACC TTGCCTTTnT TGGTGGCCAA 120  
 CTTGCTTTAT GCTATGGGTT TTTCAAACCTT AAA 153

## (2) INFORMATION FOR SEQ ID NO: 3217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3217:

CTTTGCATAT TCTGGTTTGT AGTATTCATG GTCCGTCAAT TGTAGACCCA TCAATTGCAG 60  
 CCATTACATA TGCGGAATAT CGAAGCGAAC TTCAAGTTGC TTCAAGCTGG TAGAACACGC 120  
 AnATAAAATT ATTACATC 138

## (2) INFORMATION FOR SEQ ID NO: 3218:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3218:

CACTCCAAAC CAAGGATTTA CGTGCTTTAT ATnGAGGTAA AGCACATCAT GTkGTTaATT 60  
 TTATGCMTTT TaTTGCMcMA GraTTAaGAG AAATTTTAGC nTCTTTAGGT TTGAAACGTG 120  
 TAGAAGACTT AGTTGGAAGA ACTGATTTAT TACAACGATC aTCAACATTA AAAGCGAATA 180  
 GCAAAGCGGC TAGTATTGAT GTTGAAAAAC TGTTATGTCC TTTCGATGGG CCAAACACAA 240  
 AAGAAATTCA ACAAATCAT AATCTTGAGC ATGGATTGTA TTAAACAAAT TTATATGAAG 300

AACAACGTGA TGTAGGGGTT ATTACAGGTA GTGAGATTTC GAAACAATAT GGAGAAGCAG 420  
 GACTTCCTGA AAATACAATT AATGTTTATA CGAATGGTCA TGCTGGTCAA AGTTTGCAGC 480  
 5 ATATGCA 487

(2) INFORMATION FOR SEQ ID NO: 3219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3219:

ACCAACTCGG AATCATGCAA TGAACACCAT GGTGAAATA AGTGAATTGC ATAAGTATCC 60  
 20 TGGCCTGGCA ATGCTGGTAT AACCTAAAC CTGTGTGCAC GAAATGTATT CGCTACAATT 120  
 AATGTACCTG CAAACCGTT TAATAAGAAG TTCGAAATCG TTGCACCTGT ATATGG 176

(2) INFORMATION FOR SEQ ID NO: 3220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3220:

CTGATTTAGG TAATCTTTGC GCAATTGTTT TTTTACAGTT TCGGCAAATG GGTGCCCnGG 60  
 35 CAAATAAATA TTGGCTATGC TCAAACCTGA ATTAATGGTG GGTGTGTCCG CCATCGTAAT 120  
 TGGGnCCGCC TGAAGGGCCG CATATAAATG ATAGTGCTCT TCCGAATAAA AGGTAGGCCA 180  
 40 TATGTAATTG TTTTGTGGTT ACG 203

(2) INFORMATION FOR SEQ ID NO: 3221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3221:

AGCTAAATCT TGCCAATATG GTATCAACTT TTCATTCCAC TGATAATCAT AAATTTGAGA 60

GCAATGCCAG AAATGTATTA ACAACTGGCA CGTCTAATAG ATTGCTAACG GATTGTTTAC 180  
 GTACGTTTCAT CGGCTTCTTT CGCTTCTATC GGATCTGGAG AATTGGGATG TTATGACCAC 240  
 5 TGAACCACTT ATTTGTAAGC TCTGTCGTGA TTGACTTCAT AATGCTTGCG CTTGnCCTCA 300  
 TTTCTAACAA CTCATCCTAC TTACnAAATT ACCCnGGGG TACACCTGGT CCACTTCATC 360  
 A 361

10 (2) INFORMATION FOR SEQ ID NO: 3222:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3222:

GGGGCTCCGn GGAGGCAAGG GTAGAAATG ATGTAAACGC TGCATTACTA GGCGAATTGA 60  
 AATTACATCA ATATCAAGCA GAACGGATCT TTTGTATGAC GCTTGGTACA GGCATTGGGG 120  
 25 GTGCGTACAA GAATTAATCA AGGTTTCATGT TG 152

(2) INFORMATION FOR SEQ ID NO: 3223:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3223:

TTTGTTAAAT ATAGGCCCTG CAATGAGTGT ACTGGAATGG CAATAATCAT ACCATACAGT 60  
 40 AATACATCTC CAACATTTGC CTTnAATTCT TTTCCCATGA CTACCGGTCC TGGGATGTGG 120  
 TGG 123

(2) INFORMATION FOR SEQ ID NO: 3224:

45 (i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3224:

TGGTTGGTAA CCGTAAATTA ATGCCTGACA ATGATATTAG CTnCCTAAGC ATATTTCTGA 120  
 TGATTTAACA CATTATGAAA CGAGA 145

(2) INFORMATION FOR SEQ ID NO: 3225:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3225:

GGTATTGTCT AGTCAATTAC TAACACCATT TAATTGTGGn AAGCAAAAGC TAAAGGTTAT 60  
 CGTGCGCTAT TGCAGGCATT GATGCTTCCA ACAAAGTCGA GTATTCAGTT GCATCAAAAG 120  
 TTTGCTTTT 129

(2) INFORMATION FOR SEQ ID NO: 3226:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3226:

GACACTACCG TTCCCACGTA GCATCAATCG TCTCAGTCGC ATCGTAGTCA TCTGTATGTG 60  
 TTCCAGCATA TACAATTTTG CCATCTTTAA TGACAACGTA CCATTTTCAC AACATTTATT 120  
 CATCTAnTCC TACCCTCAAA GTTATCGTTG ATCTCGTAAA TAGTCGGCAA 170

(2) INFORMATION FOR SEQ ID NO: 3227:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3227:

TTACTGCTTT ACGTTTATCA TTTTCTAATT CanAAATTCG TCATTCAGTT TCAACTTTAT 60  
 CGACAGCTGG ACTTTGCGCA GATAAATGTG CTGCTGTAAT ATCTAACACA TCGATTGCTC 120  
 TTATCTGGCA ATAATCGTTG 140



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3228:

GCGCCTATAA TTGCGCTACT TGATTTAATT GAGTAGATAA ATCTAATCCG AATAAATCCG 60  
 TGACTTGCTT GATAAATAGC AACAAATGCTn CAACTAAACC AGTTAGTACT GCTTTGTTTT 120

## (2) INFORMATION FOR SEQ ID NO: 3229:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3229:

GGCTATACAC CGACTACAGT AACATCTGGT AGCGACATTG AAAAAGACTC TAATGGTTTA 60  
 ACAACAACAG GTGTTATTAA TGGTGCTGAT AACATGTACA TTAGATAGTG GntTCTACA 119

## (2) INFORMATION FOR SEQ ID NO: 3230:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3230:

TGGGAATAGC AACCAACAAT GCGACAACAA AGCCCGCTAC AAATCTCCAT nAACTAATTG 60  
 CTAAATGTTG GAAAAATTTT TCCAGTCAAC AATGAAAGGC CATATGACTT TTTCCTACAA 120  
 GAGCAGGG 128

## (2) INFORMATION FOR SEQ ID NO: 3231:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

AATGCAGCTA TTACTTTTCA CAGATTCCAT ATCGTTCAAC ATTTAAATAG AGAACTTAAT 60  
 AAGTATCGTG TACAAGTTAT GAATGAnTAC CGTAATAAAA AAGGACCTGA TTATACAATT 120  
 5 TTC 123

(2) INFORMATION FOR SEQ ID NO: 3232:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1656 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3232:

GCCTCAAAGA ACATGCTGAA CAGTCATCGC aTTCATATAG TTTGAAGTCT CGTTTAAAAC 60  
 20 CATATCTATC ATTACGGTAT GCATATCTTT TAAAACCTAT TCTTTTGTTA TTAGGACATA 120  
 TAAATTCATC ATTAAGTTTCG TCATATTTCC AATTTTGAGT GTCGAAAATG TCACTTTTAA 180  
 ACTTTCTAGT TTTATCTTTA ATAAACATGC CATACGTAAT AAGTGGCGTT TTATTAAAAT 240  
 25 CATCTATAAT GGCCATATAG TTTTGCTCAC TACCATAACC TGCATCAGCT ACAAATAACC 300  
 GAAGtATTTT GAATCATTGT TAAAAATGGA ATTAAAGTTC TAGTATCTGT CGGGTTTTGA 360  
 30 AATAGGTCAT AGGATAAAAC AAATTGAGAA TTTGTCGCTA TTTGTAAATT GTATCCTGGC 420  
 TTAAGTTGGC CATTTTTTCAT ATGGTCTTCC TTCATTCTCA TAAAAGTTGC ATCATGATCA 480  
 GTTTTAGAAA ArCTATTTCT ATCTTTAAGA ATCGATTTTT GTTCTTCATA TTTATTTTTT 540  
 35 CTTTCGGAAT AATCATCAAA TTTmTTTTTG AACTTCTTAA TCCTAGTTCT TTTTtaCGGG 600  
 TCTGTTTTCT AATTTGAGTA CTATCTTCGT TCTCAATAGA ATGATTTAAA yCTTCGATTT 660  
 CTTTATCTAA ATGACTACCA ATTAAATCTA TTTCTTCTAT TGTAAATCG CTATCTCCAT 720  
 40 CTTCTTTTAT CTCTGGTATT ATTTTTTCTT CAACTAAGTC ACGATATAAT GTTTTTGAAT 780  
 TTTCGTTCAA TTTCGATTCTG TGATTTTGAA TACTTTTCTT CCACACAAAT GTATACCTAT 840  
 TGGCATTAGC TTCTACTTTT GTACCATCAA TAAGATTTTG CTTTAAACAT TGACTATGAA 900  
 45 ACTGGATAAA TAAAGATTCA ATTAACGCAT CAGTATTAGG ATTCACTCTA ATACGATTAA 960  
 TAGTTTATA AGAAGGTGTT TGATTTTGAG CTAACCACAT CATTCTGAATA CTGTCATGAA 1020  
 50 GTAATTTCTC TATTCTACGA CCAGAAAATA CAGATTGAGT ATATGCATAT AAGGTGATTT 1080  
 TTAACATCAT TTTTGATGA TAGGATGTTG CGCCACGATG ATGTCTGAAT TTATCGAATT 1140  
 CGCTATCAGG TATCGTTTCA ACAATTTTCAT TAACATATCG CGAAATATCA ATTTGAGGAA 1200

GGCACTTCAT TAATTTAGTT TAGTGGTATT TATTAAATTA TACGAAGGGA CCCAACACAG 1320  
 AAAATTCAAA TTATTGAATT AAACATTTAT GTGCAAGTTT GGCAAAGTGT CTTATTTTTT 1380  
 5 AAAAGTATGT AAAAGTAAAA TTACATGTTA ATACGTAGTA TTAATGGCGA GACTCCTGAG 1440  
 GGAGCAGTGC CAGTCGAAGc CGAGGCTGAG ACGGCACCCT AGGAAAGCGA rCCATTCAAT 1500  
 ACGAaGTATT GTATAAATAG AGAACAGCAG TAAGATATTT tCTAATTGAA AATTATCTTA 1560  
 10 CTGCTGTTTT TTTAGGGATT TATGTCCCAG CCTGTTTTTT GTGATTTTTTA ATAATTGAA 1620  
 TATGGrAAAT GTATTaWTct CTCATTTGTA TAGATT 1656

(2) INFORMATION FOR SEQ ID NO: 3233:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 130 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3233:

25 TTGCTCATAA ATCTTTTCTT GGCGCTCTGA ACACTATCTT CTATTCTGTC GGAATTTTTC 60  
 AAACATAGTC TTATCATTTn CTTCTAATCG CGTTAAACGC CAATCTTGTT CATGTCGTTT 120  
 GGTAATCCA 130

(2) INFORMATION FOR SEQ ID NO: 3234:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3234:

40 GCCACGATAA AGAAGTAAGA ACAACACATG GTGTTACTGG TACAGGCTCA TGTCTTGGG 60  
 AAAGTTATTT GTGnAAAATG GTGTGAATTA CCTGGGGAAA AATCAACAAA CTGACTATCC 120  
 45 AA 122

(2) INFORMATION FOR SEQ ID NO: 3235:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 173 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3235:

5 AACCAGGATA TGAAATCTGT GACTTATTGC GTTAGATCGT TTTGTAACTG CTACTATTGA 60  
 AGAAGCAGAC CAATATAAAG GTACCATTCA TTGCAAAAGC ATTACATGCA TGAACCCAGT 120  
 TGACATTTAG TTAGAGATGG AAGATAGTAT TGTGCATTTG CAGnTTCCAC ATG 173

10 (2) INFORMATION FOR SEQ ID NO: 3236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3236:

20 GCGGTGTGCA TTTGAAAATG TTATCAAGAA TATTGAGTTA ATTCGCAACG ACATTATACC 60  
 AGCGATTAnA AAGCATTTAT CAAAATACGA GGGGCGTCAT CATGAATATT GTATTATTGT 120  
 CA 122

25 (2) INFORMATION FOR SEQ ID NO: 3237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3237:

TTTTTTGCCC AAAATTTTTG GGTTTTTTTT GGGTTAAAGG AAAAAAAATT TTAAAGGGG 60  
 GGGGGGGGTC CCCCAAAAT TTTTTTCCT TCCCTTTGGT TTGGTTTTTT GGGGGGGGGG 120  
 40 CCCCCCCCCT TTGAAAACC CCTTAAAAAA ATTTAAnGGT TAAATTGGAA AAAAAAATTT 180  
 AA 182

45 (2) INFORMATION FOR SEQ ID NO: 3238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3238:

GATGAnGTTc GACAACGTAT TGTGGCAGAT GTTGCAGTTG ACTTTGAAGA A

111

(2) INFORMATION FOR SEQ ID NO: 3239:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3239:

AGTTGATCGT ATTTTCCAGA AGAGACAGAA TTAATTGATT ATCGTGTTAG TTCTGTCACT 60  
 GAAGGTACTG ATGCCCAAGC AGnAGTACAT GTAAGTTTAT TGATTGAGGT AAGACTGTCA 120

(2) INFORMATION FOR SEQ ID NO: 3240:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3240:

TACACATCTn TCTACGATTG TAGTTTATCG ATAGGTTTCG CATCATGAAA CGTGATAAAC 60  
 AACCAACATG ATGCTAGTTT GATTAAAGTTT CTTCTAAACA GACTTCAAAC GGCAGTGTTC 120  
 AGCATAT 127

(2) INFORMATION FOR SEQ ID NO: 3241:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3241:

GACTAAAATA CATGTTGGAA TACTTGGTCC CATGGGAAAA TATTGGACTG GGTAACCCAA 60  
 TCACGGCTTC TGAAGTAGTT CTTTnTCTTC TATTAAAATA GCGACGGAAT CACACCTTCT 120  
 GCGG 124

(2) INFORMATION FOR SEQ ID NO: 3242:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3242:

TACGTGTATA CACCGTTATC TTTATGGCTT TGAATTTCCA TAATAAATAC ATACGGnTTT 60  
10 TGTGCAGAGC TCAGCACATA ATCATCTTTA ACTATAGTTT CTGGGAATCA CTTCATAGTT 120  
TT 122

(2) INFORMATION FOR SEQ ID NO: 3243:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 221 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3243:

AACCTTTTCT GCAACCATAC GCCATAGgTA TGtTTTCTTT TTACAATTAA AGaGCCAACC 60  
25 GTTGTATATAG TCTAACAATG GTTGGCTCCT CTTtTTTAT GTGCTAAAAA TTTATAGGCA 120  
ATTTTATTAC AACAATGTAC ATTTAAGGTG ACCTTCATGC CAAAATCGCA TCACTCATTT 180  
30 AATGGAAGCA GCACGTCTTC ATACAAAGTC ACGATCCTAA T 221

(2) INFORMATION FOR SEQ ID NO: 3244:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 224 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3244:

TTGCATTTTG ATTGTCTGGT GACCTTGGCA ATGACAATTC CCGCTTGCAA TCGGTATCTT 60  
45 CAATATTATA ATCAGGTCTT GCCTTAGATT TTCGCTAAGT ACCGGTGATT CTCTACCATC 120  
ATACTCACCT CATGnGCTAT TTTTCTAGAG TGCTTCTTTT CACACTTTAT CTTATAAAAG 180  
GCTAGCTACT ATTACCGATT TATCATTATT AGTGGTTTTT ACCn 224

(2) INFORMATION FOR SEQ ID NO: 3245:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3245:

5 GAAAGAGATT AGTGACAAGT TGGTTGTACT ATTACGTAA AATTGGAGA TTATGTGTGG 60  
 TGTTCAGTA TCGTTCAnt AATTGATATT GCGCACCGT ATAACCATGT CAAAGTA 117

## (2) INFORMATION FOR SEQ ID NO: 3246:

## (i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3246:

15 CTACAGGCTT TCGTACCACA GGATCAAAAC TACGCACTGT GCCTTGTA TACGCATGAT 60  
 20 CAGCAATGAC ATTCCAAGTA TTACCACATG ATATTTGnCC AATTGTTACT ACCGTTC 117

## (2) INFORMATION FOR SEQ ID NO: 3247:

## (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3247:

30 TACACAnCTT TCTACGTGTG TAGTTTATCG ATAGTTTCG CATCATGAAA AGTGATAAAC 60  
 35 AGCCAACATG ATGCTAGTTT GATTAAGTTT CTTCTAAACA GACTTCAAAC GGCATGT 117

## (2) INFORMATION FOR SEQ ID NO: 3248:

## (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3248:

45 CCCGTCCTTT GGTGGAACCG TTTTGTAGAA TTAAATAATA TTACAGAGCC GCTAGCAGTA 60  
 50 ACGATCCAAA CGAATTTACC ACCATCACGT GGATTAGGAT CGAGTGCACT GTCGCGGTTG 120  
 CnTTTGGTCC TGCCA 135

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3249:

AAAAGCCAAC CCATGnAATG TTGGATTGGC TTTTACATG CCATCTGAAT CTCTAATTTT 60  
 AAAAAAATAT GGAATATAAA TAAGACAGTA AAAATTAAAT TTCAGT 106

## (2) INFORMATION FOR SEQ ID NO: 3250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3250:

AACGCTGAAG CAGATAAAAA ACGTCGTGAT AGAAGTAGAC TTAAGAAACG AGTCTGACAn 60  
 TCTAGTATTC CAAGTTGAAA AAACCTTTTAA CTGTATTTAG GCGAAAAATAT CGGTGAAGAA 120  
 GA 122

## (2) INFORMATION FOR SEQ ID NO: 3251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3251:

GAACGTTGAG ATGTCACAAA CTGGTGAAAG TGCACGTTCA ATGCCAATGA CTGATAAAAC 60  
 CAAATTCATC AATCACAATT ACTCCGAAAG CnGGTACAGG TCACTCAGTA AGTAGTAATC 120  
 CCAGTACATT AA 132

## (2) INFORMATION FOR SEQ ID NO: 3252:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3252:

GGAAAACTTT CAAATTCTGC AAATTGCCAA TTTACCTAAT AACCAAACAT CTAAGGCATG 60  
 5 TGTAATGCTG CTACnTCCGC TTCGTCATCA GCTACAATGA CAAATACAGG TGCCA 115

## (2) INFORMATION FOR SEQ ID NO: 3253:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3253:

TTTCGTCAAA TTATGGGAAT AAAATAATCA TATTTAAGAT AGTAAATATT GAATAAGTTG 60  
 20 CTTTGAAATT TATAAAATGA AAGTATAGTG TCATGGGnAG TATAATAGTC AGATATATAT 120  
 GTAACGGCAC TATATTGAAA 140

## (2) INFORMATION FOR SEQ ID NO: 3254:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3254:

AAATCTCCTA CTTTTTCTAC CCATAAATAA TTGGCTAACT TTTTCATCTT ATCTTCATCC 60  
 35 TTTCTCTTCT ATTTAAAATG CTACAAATAA ATTTCCGCGA GTAATTTTAA TGTTTTACAA 120  
 CGCTGTTCAA TACCTGGAAT AAGCGGTGCT ACTAACACCT CATCAACTTC AaACGTAGCA 180  
 40 ATGAAATCAT CTAATTGTGC TTTAACCTwT TCTTGTGTAC CTGcAATGAT GCGTGCTTGg 240  
 ATGTGCTTGA ATCATCTCTT TGTCTCGATC ATTAAGCTTA TACTTTTGTG CTGTGTCTAC 300  
 TGAAGGAAAA TCTTCAAATT CTGCAAATGT AATTTACcNa ATAACCAAAC ATCTAAGGCA 360  
 45 GTTGTAAGCG GChACTTCCG CTTCGTTATC AGCnACAAG 399

## (2) INFORMATION FOR SEQ ID NO: 3255:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3255:

ACCATTCGTC AAAATATTCC AACACGCATT TAGGTGTGCA AGGTATCGGT ACCTAACAAC 60  
 5 GAAGCTATCG TCTCACTAnC CTTAAAAGAT TTTAGAACAA CAGCTGCACT CATCAT 116

(2) INFORMATION FOR SEQ ID NO: 3256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3256:

AAAGACCTAA GGTTATGTAA TTGGCCTAAA TTTATTAATC GTTTAAntTC AGTTAGTAAA 60  
 20 AAGTCTGTGA GTAAGGGTGT ATGGAAACTG GTTAAATATT ATAGAG 106

(2) INFORMATION FOR SEQ ID NO: 3257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3257:

AACGTCCATC GTAATACCTT TTGTGTCTAA TGTAACCTGT ACATCGTCTA ATAATAAGTT 60  
 35 GACGATATCT TGACAAATGCA TCTTTATCTA GATGTAAGAn TTCAACGGAT GCCG 114

(2) INFORMATION FOR SEQ ID NO: 3258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3258:

TTAAAGCAGT TAATCCACAG GGAAAGTGGT TAATACAGTT GGGCTCTGGT GGATAGTACA 60  
 50 GTTGCAAGCA TGGTGGGCTG GGAATTGCTT CAGGGTTTAA CGAnTGGGAA AAGCCTT 117

(2) INFORMATION FOR SEQ ID NO: 3259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3259:

GGACCGCCAT ATCGTTGGCA ATCATCGCAC CTATAATCAT CGCAAGTATA ATAATATTAG 60  
CACCTTGCAT ACTTTTAAAC CAGGTTGTTA ATGCCTCAAA AATATTAGAA ATTGGTGCCC 120  
GnTT 124

(2) INFORMATION FOR SEQ ID NO: 3260:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 130 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3260:

TACCAATGTA TATCCATATA CTTTATCAT AATCATTTCA GCCGACTTTA GTTTGATGTT 60  
TTTGCTTGAT TAAATCTTT CGGCGATCTT CAGCTTGATG TTTTCGTTTG ATTAAATTGG 120  
TACAATAnAT 130

30

(2) INFORMATION FOR SEQ ID NO: 3261:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3261:

GGCCTTTTTG GGCCGGGGTT GGAAATTGGG GTTGCCTTAA TTTTTTAATT AAATTTTGGA 60  
ATTAAAAAAG GAAAAAnTCC AAAGGTTAAT TTTAAAAAAA GCCCAAGGTT TTAAAAATTC 120  
CCCCAACCAA AAAGGGGGGG AAAAAAGGTT GGGGGTTTTA AAAATTAnCC AAGGTTTTTG 180  
GGGCCCTCCC TTGGGGGTTG GGAATTAAAG GTTAACCAAG GTTTTTGGCC AAGGGGCCCA 240  
ATTGGGGGTT GGGGCCCTGG GGGAAAATTT TTGCCCTTTC CCAAGGGGTT TTTTAAACC 300  
CGGATTTTTG GAAAAAAGAA AGCCCATTTT CCCCCAACCC CnAAAGCCCA GTTCCCGCCC 360  
ATTTTCCCGG GGTAACCCTG CCCCCACCGG GGCCATTTTT 400

50

(2) INFORMATION FOR SEQ ID NO: 3262:

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- (A) LENGTH: 134 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3262:

10 TGGTTCAATG GAAACGTGTA CCGCAAATnC CGTTAAATGT TGTTGGATGT TGAGAGACGT 60  
 GGCTGAACTG GCACATTTGG GCAATGACCA ATGGAACAAG CTAATGGGCA AGCGATTATT 120  
 GCGACGGCTG ATGG 134

15

(2) INFORMATION FOR SEQ ID NO: 3263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3263:

25

TTTTTTTCTG TTGGTACTTG TTTTGTGGTT GGCGATTGTG GTGTGTCTGA nTTAGTAGAT 60  
 TGCATTGGTT GTGGCGTGTT TGCTTGATGG AGGTGTTGTC ACTTT 105

30

(2) INFORMATION FOR SEQ ID NO: 3264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3264:

40

GTTCCATCAT TCCCACnAT ATCCAACATG TGGGCTACTG CAATGCTTTA GGCGTCAATG 60  
 CCTCATCATC ATCACAGCGC CAGTAAATGC GTATAATTAA ATTAATT 107

45

(2) INFORMATION FOR SEQ ID NO: 3265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3265:

55

GTCGTAACAA TGGTTCGTTA CCAAAGCATA nTTCGCCTTC TTGGCATCG

109

(2) INFORMATION FOR SEQ ID NO: 3266:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3266:

TTACCTTTAA AATAAnGTTT TCCACTAGTT GGGCTAAACA AATTACATAT TTTGCTTTTG 60

GAAATGTACT TTTTACCACT ACCTGATGGA CCTATAATGG GCAA 104

(2) INFORMATION FOR SEQ ID NO: 3267:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3267:

TAAGCCATCA GAAACAAATG CATATAACGn AACAAACACAT GCAAATGGTT CAAGTATCAT 60

ACGGTGCTCG TCCGACATAC AAGAAGCCAA GCGAGAACGA ATGCATACAA TGTAACA 117

(2) INFORMATION FOR SEQ ID NO: 3268:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3268:

GCTGCACAAG CACAACCTGG AATCAGCAAC ACCGGCAAAC CAnCAGGTCA AGGAATAACC 60

AAGCAGCACC TCATAATAAT GCAACACCGG CAATCAAACA C 101

(2) INFORMATION FOR SEQ ID NO: 3269:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3269:

CATACCCTAT TTTAGATATT ACCTTATTAC AAAATATTTT TACATTAATG TCAGCTGCAG 60  
 5 GTTAGTATTG TTTTCCAAAA TTTACCGGTC ATCTTTGCCA ATTGGGTGTC GCCAATCGGG 120  
 ATTTATCCTA GGAAGCCGAT TAAAGGGTA CTGCCAGGGT TTTAGCCTGC nGCTGCCTCG 180  
 GGGTTTTCTT TAAATTAATG nAACCGC 207

(2) INFORMATION FOR SEQ ID NO: 3270:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3270:

ATATTCGCAC CACCATAAAC ATAGATGGTG TTTTGTCTT CTGCATTCAC AGTGATAAAA 60  
 GGGCTTGnC CCGTTTTTGC TTCAGCTGTT TTGAATAATA TATGATG 107

(2) INFORMATION FOR SEQ ID NO: 3271:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3271:

TTGGTTACAC TTCTGCTAGT TTTAGTAACG ATGGTCCAAG ATTGTATGAG CCTATTCATG 60  
 GATCAGCACC AGATATTGCA GGTAAAAACG TTGCCAATCC ATTTGGGATG GTTCTnATGC 120  
 40 TT 122

(2) INFORMATION FOR SEQ ID NO: 3272:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 360 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3272:

GAAGGATGAT GATTCGGAGC AnCTTCTTGC AGAAGAnGCG GnAATAACGT GACATATTGT 60

TGCGAGCGCT TGACAATCTA TTCTTTTTTAA AGAAAGCGGT TGTTAGACAA TGCATTAAGA 180  
 GAAATTAAAG CGGmGTTTAC TTTTGTAAAT GAGCATTTGA TTTTtTGAAA ATAAAGCAGT 240  
 5 ATGCAGGCGC TTGACTAAAA AGAAATTGTA CATTGACAAC TAGATAAGTA AAGTGAAAAT 300  
 ATAGATTTTA CCCAAGCAAA ACCGAGTGAA TAAAGAGTTT TAAATAAGCT TGGATTCATA 360

(2) INFORMATION FOR SEQ ID NO: 3273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3273:

20 TCAATTTTAA CTGCAAATAA TAAAGCTGCA TGATTTACTT TGTACATTAT TGTAATTTCA 60  
 GTAATACGAG GCAATGTCAG TnGCAGTGTT TAATAAATTT TGTTCGCTAT TT 112

(2) INFORMATION FOR SEQ ID NO: 3274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3274:

35 TACATTTATG CAATCAACGT TACATTCAAT CGTTGGAGAA AATTGGCTTT ATTGACTTAC 60  
 TAAAATCTAA AAAATCATAT GAAAGAATTG CACATATGTT AAAAActGGT AAGCCATTAC 120  
 GTAATTAAAA GATAGTCATT AAGAGAGGAT GATAACCATG CAAGAAAGCA TACATTGTAG 180  
 40 CTTATGGGCG TTCAGCGCAG CGAAAGCAAA GCAAGGCGCA TTATTCCACG AAAAGACCTG 240  
 nTGATGTCGC AGCCAAAGTA ATTACAAGGC GTATTTGAAA ACGTATTGAC GGGAnAAATT 300  
 CCAATAAGGA TTATGGATTG nAAGATGGTC CATTTG 336

(2) INFORMATION FOR SEQ ID NO: 3275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

CAAATGCTTT TGCCACCCCA GATGCAATGG TACCAACACC TGTTTTCGAA ACTAATTTTA 60  
 CCGGCGATAT CTGGCATCTT TTATTTTCGGC ATTTTTCCTAA ATCATGGTTA TTCCAGTTTG 120  
 5 GCGGCTTAAA AATTCTTT 138

(2) INFORMATION FOR SEQ ID NO: 3276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3276:

CATTATACGA GATAAGTAA AATTGATGAT GTGACTAAAA AAGATGCACA ACAATTATTG 60  
 20 AAGATGCAAA AGAATTGCAT GCCAAGCTGA TACATTAGAT A 101

(2) INFORMATION FOR SEQ ID NO: 3277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3277:

TGGTTATTCG TTCCTGATCG TTGTTGGTAT CTCACTATTC AATATTTATC GTGTGGCATT 60  
 35 ACTTTAGTTA CACCAGGTAC ATTTGAACCT GGCACCTGTT GCGAGTATTT CCGGTCTCGT  
 CATT 124

(2) INFORMATION FOR SEQ ID NO: 3278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3278:

GACTTTTTGA CCAGTTGTAG CACGACCACC GAGAGTAGCA TTGCATATGC AATCATTGTA 60  
 50 CCTTCGCCAA CGACTGnGCC AATATTAATT GTTGCGCCCA TCATAACGAC 110

(2) INFORMATION FOR SEQ ID NO: 3279:



- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3279:

10 TTGGTATATA GAGGGCAACC GCACCTGATA AAATGTGnCA CAGTTTTTAC AAGAGGTAA 60  
 GGAATGAGTT TGGAGGCATA CGAGCATCAA GATACCATTC GATGTTAGTA ATT 113

(2) INFORMATION FOR SEQ ID NO: 3280:

15

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3280:

25 TTACCGTCAC CGTAATCAGT CCATACTTTA TCAGCTATAC CGGCTTTAAC AGCATAAATG 60  
 TTCGTTCTCG TAGGCATACC AAAGnCGATA CCATAGTGAC G 101

(2) INFORMATION FOR SEQ ID NO: 3281:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3281:

40 ACTATGTTTG AnAAATTCGA CAGAATCAGA AGCACAGTCT GAGAACGCAA GAAAAAATTT 60  
 ATGACAAGTT AGATAGAAAT TTCGACGAAC TAAGGGCGTG ACCAAGAAGA AGATGA 116

(2) INFORMATION FOR SEQ ID NO: 3282:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3282:

55 ACTTGGTAG ATAATATAGC GTCGATTGTA TCACGAGTGT CTGTTCCAGT CATTATAAAA 60

CGTCGTTCTG ATGCTTTTCC TGAATCAT

148

(2) INFORMATION FOR SEQ ID NO: 3283:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3283:

AAATGACGAT AGAGTCAGGT ATTAATCAT TTTnCAATAG TATCAGGAAG ACTACCAAGC 60  
 TTATGTTGAA GGGCATCTTT TGGCGTTACC GGGTTGGGCA 100

(2) INFORMATION FOR SEQ ID NO: 3284:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3284:

TTAAGAAACC GAGCAGCGCA TAAncCTGCA GTACCTTATC GCTTCTAGAT AATCCGATTG 60  
 CGACACCATT GCAAGATGAC CGGTAATTTT GGAACATATA C 101

(2) INFORMATION FOR SEQ ID NO: 3285:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3285:

TAAAATATTT CGCATCCCTA CACGCTAAAA TAATACATTA CACTTAAAAC GGCTGTTTTA 60  
 AAGCATCCTC CCATAAACAT CATCTAGTTG ATAATAGGGG GGGGGn 106

(2) INFORMATION FOR SEQ ID NO: 3286:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 95 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3286:

TTTAAACAATA CCTCAGAACA TACTATGGAA ATTGCTGCAA AGTTAATTGG GCATGCATAT 60  
 5 TGATCATAAT GCGCTTTTAA ATAAAATGGT GGAGA 95

(2) INFORMATION FOR SEQ ID NO: 3287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3287:

TCGAAATAAT ATCTACGCAC ACTGATAACA TAAAAATGCC TGGTAGAATA CTAATGAAAT 60  
 20 AAGTGCATAC ATGACCACAT GAATGCTAAT AACATGCnAG AACCCATTTT TTGAATATTT 120  
 CACCACTCGA ATCATCAATA C 141

(2) INFORMATION FOR SEQ ID NO: 3288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3288:

TAGCTGGACC AGAACACGGT TCGACGTTGC AGGAAAGTCTT GAACAGTCGC TGAACGCCAA 60  
 35 GGCGATACTT GGGTTATCCA TGGTGAAAGn AATGGATTGG TGGTGCA 107

(2) INFORMATION FOR SEQ ID NO: 3289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 89 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3289:

GCTTTGCAAT GCCGATGTTA CTCGCAATAA TCATGTCGCA TCAATTACTT ATGGAAAGCA 60  
 50 GATTTACGTA TGTCTACAAG TTTAGGCGC 89

(2) INFORMATION FOR SEQ ID NO: 3290:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3290:

10 TGTACGCCA ACAACAAATC CTACGTCGAC AACTATTTTT AAGCGATGAT TGCAATTAGA 60  
 CAGAAATCCA ATCATTTTTG CATTCCATCC AGTGCACAGA ATnTCGAG 108

(2) INFORMATION FOR SEQ ID NO: 3291:

15

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3291:

25 GATCAAGnCC TGAGAATTTA ATTTAATTTA TTTTATATT GGAGATGGTT AAAATGCTAA 60  
 AACTCAACAT GAGTAACCAA AATATTGCCC TTAAAAATGC TGATCATTG 109

(2) INFORMATION FOR SEQ ID NO: 3292:

30

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3292:

40 TTGATAATTT TGATATAGAA AGTTATTTAA AATTCTGAATA AAAATAATAA CTCATCGACG 60  
 TTTAATGGCT AGGTTCCAAT CAACTATGnG ACATAAATTC AAATTGATC ACGTAACGAA 120  
 A 121

(2) INFORMATION FOR SEQ ID NO: 3293:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3293:

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GCGCGTAATA CCTGCAGTAC CTCTATCGCT TCTAGATAAT GCGGTTG

107

## (2) INFORMATION FOR SEQ ID NO: 3294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3294:

AAAATGTTAA ACCAAAAAGT TTGGTGAGTT ATAATATGGA ATATTAAATC TGTAGAAGAT

60

AAAGCGAATA TAAAGTGATT AACTTTGGTA ATAAAGAATT AACAGCGAAA n

111

## (2) INFORMATION FOR SEQ ID NO: 3295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3295:

CCCCGACTAA ATCGAACGCT TTAATGTAAT GATTTGTCCG AATCCCCATC CTGCACCTGA

60

TAATAAGGCG AATAGCAAGT TGGTTCCCGT nGGGAAGCCA CTTGA

105

## (2) INFORMATION FOR SEQ ID NO: 3296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3296:

ATTTATTCAA AACCCGCCAC ATGGGGCAAC GGTGCCATG GCATGATAGT CCAGATACAT

60

GGAAAGGAAT ACAGTCCGGT TAACACTCCA TTAAAAACCT GCGGGTTGGT TAAACCATTT

120

AACCTAAATG GGTCCAAGG GTTAACGCGG TTAAATGTT TGGAAAGGTT TnCCCAGTTT

180

CCAAAAAGTT TTnATTCCC C

201

## (2) INFORMATION FOR SEQ ID NO: 3297:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3297:

TTTAGACTTT CATCAGTGTT GAATATTTCT CCTTTAACGG TTATAGGTAA TATTTCTGA 60  
10 GAAATATTTT CATTCCTTAC ATTTTCCGCT GTCAATTGAT GACTTCGATA AGCAAATTCA 120  
TCTTGTAATT CTCTTGAAAC ATCATACATC TkGGCCACAT TTTCAGCACC TkGAATCATT 180  
GATGGGTCGC TCATTTTCAGG TGCAAATGAT GCACGCTCAT AAAACTCAGG TAATGCTGTT 240  
15 TCGTACACAG AATGCGGTCG TTTGATTTTC CAAGGTGCTC GACTTGCTACT TTCAACACCA 300  
CCTGCAATAT ATACCTTGCC AGctCCGGCT TGGATCATGC GACATGCATA TTGaACACTT 360  
TCAAGTCCAG ACCCACATTG cCGATCGrTT GTGaCGCCAG TATTGAAGCT TAAGC 415

20

(2) INFORMATION FOR SEQ ID NO: 3298:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
25 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3298:

TTAATTGCAG CAGAGCGACT AGCTGATTCA GAGGTGTTAG TTTGTACGGT AATAGGATTG 60  
CCATTTAGGT GCATCGACCA ACTGCCCCGAC GAAAAGCCAT TTTGAAAACC AGAAnGATGC 120  
35 CGATTCAAAA ATGGGTGCCA AGATTGAAAA TTTGGACCAA TGGG 164

(2) INFORMATION FOR SEQ ID NO: 3299:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3299:

GTAATGCCA TTTTCACGTT TCTTAGTTAT TGGCATTTTT TAAATGCGAT GTGTGGCTTC 60  
TACATAACGG GAAATTTTAA GTTTTATGAA TCnACATATC AATTGC 106

50

(2) INFORMATION FOR SEQ ID NO: 3300:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3300:

AAAAGGTGTT ATGAGATTAG TAAATCANTA GACAAGCAGG TAAATTAAGT GATGTCGCGT 60

10 CATTTAAGGA AGCGATTCAC AATCGAGAAC ACAAAGTACA AC 102

(2) INFORMATION FOR SEQ ID NO: 3301:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3301:

TTAAAAGTTT GGAGATTATC GTGTCGTCTT CAAGTATGCG TTCATTAATT GATATTGGCG 60

25 CACCGTATAA CCATGTCAA GTACCATTTG NAATCAGTCA TTGGCGCATT GGCTGCCCTA 120

GCGTTCA 127

(2) INFORMATION FOR SEQ ID NO: 3302:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 137 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3302:

CCAGCTAGAC GATTGCTAAG GTATTGGATG TTTGAAACGT CCATGGACCC AATTGATTAA 60

40 TTGGnTGTA CTGGTCAAT GGTATATCC TAAATGCACT GGCCTGCTGG TGTCTTCTG 120

GCGTTGCTT CGGAAAT 137

(2) INFORMATION FOR SEQ ID NO: 3303:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3303:

55

ATATAAATTA ACGACGCGTT AATGCAGGCT GATGTGATTT TTATTGGTTT CCCAATTTTC 120  
 AAGCTTCCAT CCCTGGTGCT TTGAAAAATG TGTTCGATCT ACTTCCAGTC AATGCGTTTC 180  
 5 GTGACAAGGT AATAGGACTT GTAGCGACAG CAGGTTCTAG TAAACATTAT TTAATTCCTG 240  
 AAATGCATTT AAAACCAATA TTGAGTTACA TGAAAGCACA TACGATGCAA ACGTATTATT 300  
 TATTGAAGAG AAAGATTTTT CAAATCAACA AATTGTCAAT GATGATGTTG TATTTGCGTT 360  
 10 AAAAGCGTTG GCACAATCCA CAATGCGAAC TGCCAAAGT 399

## (2) INFORMATION FOR SEQ ID NO: 3304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3304:

CACCATTATT TACAGGACCT nCGATGACGT GTGGTCCTGT GTTAAGACAT AACATAATAT 60  
 25 TCTACCTTTG TAATCAGTAC GGGTTTATCT ATCACAGTAC GG 102

## (2) INFORMATION FOR SEQ ID NO: 3305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3305:

TCAGCGTTAT CAATGAnTGA CTCTAATGCC TTTTACCCA TTTTGTAAA TGGAACATGG 60  
 AAGCATAGAG ATGCGrAGTC AGCTAGCGAC TTACCTTGAC GTTTTGC GTA TTCATTCCAG 120  
 40 CTTTGTTGGr ATGAGCGGAT ATAAGCATCT TTAGATAATG CACCATCAAC TAATGGATAT 180  
 TTATGTCCAG TTGGACGCCA GA 202

## (2) INFORMATION FOR SEQ ID NO: 3306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



AAGATAGGGA TTTACACCTA TACCTCGTTC CGGGGAAGGG TCGGTGTTCT GAAAAGTTGG 60  
 AACTACTCCC G<sub>n</sub>CAAAATATT AAATTATGGG AGCGGGAAGG ATCAGGGATT TGACACCTAT 120  
 5 GACCTCCATT CCCAGGGAAG GGAATGTGAT T 151

## (2) INFORMATION FOR SEQ ID NO: 3307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3307:

AATTTCTGTTA CCTGCGCCTT CTTTTTGCGG TTTTAAATA AGCGAAAATT TCAGGCGGTA 60  
 20 AGACATAACG TCCCAGAATA GCTAGGG 87

## (2) INFORMATION FOR SEQ ID NO: 3308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3308:

ATGATGGCAA AGTCACCAAA CTGATTGTGC ACACCAATCC ATCCATCTGC GCTGTAAATA 60  
 35 ATGGTTCGCA ATAATTTTAA AATACCTTCC GCTACATTG ATTTAAAGCT GGTTCGCGA<sub>n</sub> 120  
 TGGACTAGA 129

## (2) INFORMATION FOR SEQ ID NO: 3309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3309:

GTTCTTTTTA TCGTAGTTGG TGGGACTCCT TATCGGCATC GCGGCTGGAC TCTAGGCGGT 60  
 50 GGA<sub>n</sub>ACGGAC ATTCAAAAGG GATTTAGTTC ATCCAGATG GATTTCATTT TGGGGAATTC 120  
 CATTTGGA 128

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 83 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3310:

GTACGATTCA GCATAAAGTA CACCACATTT GTCACTACGA CATCTGTAGC TGGTATTGAT 60  
CATGCAATCA TGAATAACGC TAA 83

(2) INFORMATION FOR SEQ ID NO: 3311:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3311:

CTGAGGATAA AGCGTCTCCA AGATAAGTCT AAAGATCATC ATAATGGGCA AAAAAGGTGG 60  
CAGCGATTTCG GTGGCTGGGA ACAAG 85

(2) INFORMATION FOR SEQ ID NO: 3312:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 129 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3312:

ATTTTATGTC TAAATGCTGG ACCAACAGTA TTGGCTATTA TTTGGTAACG TGATTACTAC 60  
AAAAAATGGA CCGTTGAGTT CGTGGCACAT GATTGATTTT GTAAGTAAGT ATGATGCACA 120  
TGGGCTnTT 129

(2) INFORMATION FOR SEQ ID NO: 3313:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

TCACCTAAAA TTAATCAAGG GACTTAACAT TGGCGAGTCA AGGTATTGAT CAAGCTAATG 60  
GCACAGTTAA ATGATGCCAA AG 82

(2) INFORMATION FOR SEQ ID NO: 3314:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 87 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3314:

ATGTTATGGA AGAATATTGA GTTAATTGGC AACGACATTA TACCGGCGAT TAAAAAGCCT 60  
TTATCAAAAT AGTGAGGGGC GTCATCA 87

(2) INFORMATION FOR SEQ ID NO: 3315:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3315:

TGAACCCGTC GTTGCCCATTT TGCCGGTTCC CGAAAGCCGG CGCCnACGGT TCTCCCTGCC 60  
TAAATAGGGG ATGGAATATT AAACCATCTG CACCTGGTTT AACACGCTTT GCAATTTGAG 120  
TTAAGACATC ATAAGG 136

(2) INFORMATION FOR SEQ ID NO: 3316:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3316:

CATTGGCTGT GTCCATTTTT AATCGTTGCG AGTACGThTA TTAGCAACTT GGAAC TGCCA 60  
TTGTTAATTT CAGCTGTCTG TTACATTTCA ACCATAGTCT TTCACAAT 108

(2) INFORMATION FOR SEQ ID NO: 3317:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 142 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3317:

ATCTGAAGCT GGGTTTACTA GAGAAGGTAT GTACGTGACA TGAATTACTA ATGGATTTAT 60  
TCATCGAGTT ACATCTATAG TTTATTAAAT CAGATACGCC AAAATGcAA TTAGCTTACA 120  
AAGATGATGC ATTAAATGCA CG 142

(2) INFORMATION FOR SEQ ID NO: 3318:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 386 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3318:

AACATTATGT TAATCAACCT AATGAACGtC TTTATAAATT ACGCTAAACA ATATACAGAT 60  
ATGCCGTTTC TTATCATGCT GGATGAAGAT GAAAATGGAT ATAAAGCGGG TCGATTTTTA 120  
AGAGCGAGTG ACTTAGGTCA AACACAGAG CAAGGCGAAT GGAAGCCAGT TATTCATGAT 180  
GCAATCAGCG ATAGTTTAGT AGTACCTAAT GGCACAATGG GTCAACGTTG GGAAGAAGGT 240  
AAGAAGTGGA ACTTAAAACT AGAAACAGAA GATGGTTnTA AAATTAnCCC TACATTATCA 300  
ATGACAGAAG GTGGATACGA ATTAGAAACA ATTCAATTCC CATACTTTGA TAGTGATGGA 360  
GATGGGATAT CATCGTCCAA TCCnAC 386

35

(2) INFORMATION FOR SEQ ID NO: 3319:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 123 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3319:

ACAATGAATG ACATGATTCT AGGTGGACGA CCCCTCCTAT TTTGCATAAA TGCTTTTGA 60  
ATCGCCGGTC ATAATGTTCT TTGnCCAATT AACTCAATAT TCTTCATGAC ATTTTCAAAT 120  
GGC 123

50

(2) INFORMATION FOR SEQ ID NO: 3320:

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- (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3320:

10 GGCGAACTGT CAATTGCCGG TATACAACGT ATTTTAAGAG CTGCAGAACA TnCGGGTGT 60  
 AAACGTGTGG TCAATGACTG CCAACTTTGG TGCAGTTGGT TTTA 104

(2) INFORMATION FOR SEQ ID NO: 3321:

- 15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3321:

25 GCGCCGGTTT TAACAGGTAA TTAAAACCA AATACTGATA GTAATGCATT AATAGTCAGC 60  
 AAAATACAAG TATT 74

(2) INFORMATION FOR SEQ ID NO: 3322:

- 30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3322:

40 TCACTCAGGG GGAGATGTCA ATGGGTCAAC ATTATTTGAC AAGGTGTGGA CAGACATGTG 60  
 TTATACGGGA AATTGGGCGA CCGCACT 87

(2) INFORMATION FOR SEQ ID NO: 3323:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3323:

55 TGCCAAATGT TCCCATAATT TCATTACGAn TCCTAAGTAG GTGGCTATCA TTACGATGCG 60

AATGCGGTCG GAAAGATAAA TAGCTTCATC AATGTCATGC GTCACTAAAA TAATAGTTGA 180  
 TTGCGTTTTTA TGTTTTAGTT GCACTAGTTG ATCCTGAAGT TTATAACGTG TAAATGCATC 240  
 5 TAATGCACCT AATGGCTCAT CCATCAATAT AACGTTAGGC TTATGCACAT GCGCTCGACA 300  
 TAGTGCCAAA CGTTGTTTCA TACCCCCGGA cAGTTGCTCG GGAAAATGCT TTCCCCTGTC 360  
 TTCTAAATCA ACTAATTTAA GCTGTGCGTT AATCTCTTCA 400

10 (2) INFORMATION FOR SEQ ID NO: 3324:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3324:

GAAACCATCG ATTGTAGCAC GAACCATGTT GGATTGGTGT GTTTGnATCC TAATGTATTT 60  
 ACTTAAGATA TCAGTGATAC CTGTCTAATT GCAAGTACGG TCAGGA 106

25 (2) INFORMATION FOR SEQ ID NO: 3325:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3325:

35 TCTGAAnTCG CTGTCTGAAT CTGGAATCAC TGTCTGAAAT CCGAAATCGC TAATCTGAAA 60  
 TCCTGAAATC CGCTAATCTG AAACCTGGAA GTCGCTGGTC TGGAAGCCCT GAA 113

40 (2) INFORMATION FOR SEQ ID NO: 3326:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3326:

50 TGTCACGTAC TTGCTGTTCA ACAAATACGT CTTACTGGAC GTGCACCTCA TTCTTCATCA 60  
 TAGCCTTCTT CATTAACC 78

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 119 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3327:

AATTGAAAAT TATCTTACTG CGGTTTTTTAG GGGTTTATGT CCCAGCCTCT TACTCnAATT 60  
ATATTCACCTA TCCATTAGAC CAAATGGGCC ATTTCCAATA ATCCCGCGGT GGTTCGGA 119

(2) INFORMATION FOR SEQ ID NO: 3328:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 71 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3328:

GTGTTAAAC GTCACGACGT TTGTTTAAAA TGATGCGTCA TAATGTCTAC ACTTTGCTTG 60  
CGATCATTCA T 71

(2) INFORMATION FOR SEQ ID NO: 3329:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 70 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3329:

CTGACGAACC TTGCATCATT TAACTGTCCA TTAGCTTGAT CAATACCTTG ACTCGCAATG 60  
TTAAGTCCTT 70

(2) INFORMATION FOR SEQ ID NO: 3330:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 69 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3330:

CCAATCTCG

69

## (2) INFORMATION FOR SEQ ID NO: 3331:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3331:

GGACACTAAC ATTAATATGG ACTGGTAATG TTGCTGTAA TAAACTCATA CCAAATCCTG 60  
GGCATCTCTT 70

## (2) INFORMATION FOR SEQ ID NO: 3332:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3332:

CCTTGGGCAC CTTCAATTTG CATATTACGA CGTTTTGCAG CTTGGTTCAA TTGGCAATAA 60  
CTACACCTAG TGCAGTTGGA TC 82

## (2) INFORMATION FOR SEQ ID NO: 3333:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3333:

ATAAAATAAT TAGAACTCTA ACATTGGTTT AACTAATGTT TAGACTTTTT GTGGTTTGTA 60  
AAAACAAGTA TATTGA 76

## (2) INFORMATION FOR SEQ ID NO: 3334:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3334:

TGGTAAGTTG AATAAAGTAT TGAAATCGTT GCCAATATCT TTATACCGTT GGTTCTGCGC 60  
5 ATTTATTGGG AGGC 74

(2) INFORMATION FOR SEQ ID NO: 3335:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3335:

AGATAGTTAT GCGCAGTTAA AAACGGTGAA ATGTATTTGC AATAATATGC ATATAGGCAC 60  
20 CATACGAGTA AGGG 74

(2) INFORMATION FOR SEQ ID NO: 3336:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3336:

TTGAATCATT GTTAAAAATG GAATTAAAGT TGCTAGTATC TGTCGGGTTT TGAAATAGGT 60  
CATAGGAGAA AACAGG 76

35 (2) INFORMATION FOR SEQ ID NO: 3337:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3337:

CCAAAGAGGC GTTATTAAGC TATTGATAAA AGTTATGTTA CTAAAAAATG TATTTAAATA 60  
AGTAGTACCT AA 72

50 (2) INFORMATION FOR SEQ ID NO: 3338:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 75 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3338:

ATAAGTCGTT CTACCGTATA GCCGTCATTA TTAATCACAA ATAATACCGG TTTAATATGC 60

10 TGTCTGGTCA TAGTT 75

(2) INFORMATION FOR SEQ ID NO: 3339:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3339:

TTCATCAAAG TATTCCAATG GGAGAAAAAG CACAATAACA TTATCACTGG ATGCTAAATC 60

25 TAAAGGAACC TC 72

(2) INFORMATION FOR SEQ ID NO: 3340:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3340:

GTAAAAATAT TTTAATGAAT GTCTTCACTG GAGAACCATT GACAACCTGG TACAAGTGGG 60

40 ATTATTGGCG TTATTTT 77

(2) INFORMATION FOR SEQ ID NO: 3341:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3341:

AACCAAGGAT GGATTGCTAT TTTAATCCTT GGTGCTCTT TATTTTATTT AAATTGTAGA 60

55 ACCTAGA 67